STIC Search Report
EIC 1700

STIC Database Tracking Number: 160978

TO: Helen Pezzuto **Location: REM 10A29** **Art Unit : 1713** **August 1, 2005** **Case Serial Number: 10/670478**	**From: Kathleen Fuller** **Location: EIC 1700** **REMSEN 4B28** **Phone: 571/272-2505** **Kathleen.Fuller@uspto.gov**

Search Notes

STIC Search Results Feedback Form

USPTO

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher or contact:*

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1713*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Please Expedite - Amended Case -
Vam Jagannathan SPE TC 1700
Access DB# 160978

7/29/05 **SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: HELEN PEZUTO Examiner #: 70058 Date: 7/29/05
Art Unit: 1713 Phone Number ~~302-1108~~ Serial Number: 10/670,478
Mail Box and Bldg/Room Location: REM-10A29 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.
****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: SEE ATTACHED

Inventors (please provide full names):

Earliest Priority Filing Date: 9/26/02

SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Ctr
JUL 29 RECD
Pat. & T.M. Office

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Claims 1-35, 72-89 elected/under consideration (attached)
(1) Search for a "block" polymer/copolymer containing a "1st block" selected from monomers defined in Cls 4 or Cl. 10 or Cl. 15. (3 embodiments)
(2) search for a monomer embodiment of "block polymer" defined in Cl. 16, wherein "1st block" is defined in Cls. 19-22 & species in Cl. 23; wherein the "2nd block" is defined in Cls 29-32.
(3) search elected block polymer species in Ex. 1 → poly(methyl methacrylate/acrylic acid/methyl acrylate)

Key words
block polymer/copolymer, Tg/glass transition temp. polydispersity, molecular weight, water-insoluble.

Many Thanks!

****

STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher:	NA Sequence (#)		STN	✓
Searcher Phone #:	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	3	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic		Dr.Link	
Date Completed: 8/1/05	Litigation		Lexis/Nexis	
Searcher Prep & Review Time: 40	Fulltext		Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time: 100	Other		Other (specify)	

PTO-1590 (8-01)

=> FILE REG
FILE 'REGISTRY' ENTERED AT 11:51:17 ON 01 AUG 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 29 JUL 2005 HIGHEST RN 857722-60-2
DICTIONARY FILE UPDATES: 29 JUL 2005 HIGHEST RN 857722-60-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

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**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005. A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************
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Structure search iteration limits have been increased. See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> FILE HCAPLU
FILE 'HCAPLUS' ENTERED AT 11:51:21 ON 01 AUG 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 1 Aug 2005 VOL 143 ISS 6
FILE LAST UPDATED: 31 Jul 2005 (20050731/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

KATHLEEN FULLER EIC 1700 REMSON 4B28 571/272-2505

polyacrylates

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=> D QUE L30
L9        310239 SEA FILE=REGISTRY ABB=ON  PACR/PCT
L11        75720 SEA FILE=REGISTRY ABB=ON  L9 AND 3/NC
L14        48289 SEA FILE=REGISTRY ABB=ON  L11 NOT 46.150.18/RID
L16        44419 SEA FILE=REGISTRY ABB=ON  L14 NOT 1.30.1/RID
L17        35664 SEA FILE=REGISTRY ABB=ON  L16 NOT (PM/PCT OR OTHER/PCT OR
                 PUR/PCT)
L18        31845 SEA FILE=REGISTRY ABB=ON  L17 NOT SALT
L19        28735 SEA FILE=REGISTRY ABB=ON  L18 NOT (1-20/P,SI)
L20        44470 SEA FILE=HCAPLUS ABB=ON   L19
L23          801 SEA FILE=HCAPLUS ABB=ON   L20(L)(BLOCK? OR TRIBLOCK?)
L24           79 SEA FILE=HCAPLUS ABB=ON   L23 AND (TG OR GLASS TRANSITION)
L25        15377 SEA FILE=HCAPLUS ABB=ON   L20(L)PREP/RL
L26           57 SEA FILE=HCAPLUS ABB=ON   L24 AND L25
L27           12 SEA FILE=HCAPLUS ABB=ON   L26 AND COSMETIC?/SC,SX
L28           12 SEA FILE=HCAPLUS ABB=ON   L24 AND COSMETIC?/SC,SX
L29           10 SEA FILE=HCAPLUS ABB=ON   L26 AND COS/RL
L30           12 SEA FILE=HCAPLUS ABB=ON   (L27 OR L28 OR L29)
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block polymers with and cosmetic use

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=> D L30 1-12 BIB ABS IND HITSTR

L30  ANSWER 1 OF 12  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2005:570793  HCAPLUS
DN   143:83218
TI   Cosmetic compositions comprising a dispersion of particles of a graft
     ethylenic polymer and a film-forming agent
IN   Blin, Xavier; Jager Lezer, Nathalie
PA   L'Oreal, Fr.
SO   PCT Int. Appl., 201 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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PI   WO 2005058274        A1    20050630    WO 2004-IB4127          20041210
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     WO 2004055080        A2    20040701    WO 2003-FR303712        20031212
     WO 2004055080        A3    20040812
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
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TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
WO 2004055081 A2 20040701 WO 2003-FR303713 20031212
WO 2004055081 A3 20040805
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
WO 2004055082 A2 20040701 WO 2003-FR303714 20031212
WO 2004055082 A3 20040910
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
FR 2863707 A1 20050617 FR 2003-51108 20031218
FR 2863493 A1 20050617 FR 2004-50540 20040318
PRAI WO 2003-FR3712 A 20031212
WO 2003-FR3713 A 20031212
WO 2003-FR3714 A 20031212
FR 2004-50540 A 20040318
US 2004-556063P P 20040325
FR 2002-15737 A 20021212
FR 2002-15738 A 20021212
FR 2002-15739 A 20021212
WO 2003-FR3708 A 20031212

AB The present invention relates to a cosmetic composition comprising a dispersion of particles of a grafted ethylenic polymer in a liquid fatty phase, and a film-forming agent. The film-forming agent may be soluble or dispersible in the said liquid fatty phase. The composition may contain an aqueous phase, in which case the film-forming agent may be soluble or dispersible in the aqueous phase. A subject of the invention is also the use of a combination of such a grafted ethylene polymer and of a film-forming agent to improve the staying power and/or the transfer resistance of the the composition on keratin materials.

IC ICM A61K007-48
ICS C08L051-00; C08F290-02; C08K003-34
CC 62-4 (Essential Oils and **Cosmetics**)
ST cosmetic dispersion ethylenic polymer film former
IT Resins
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(Manila elemi; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(acrylic, graft; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)

(acrylic; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Resins
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(copals; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Alopecia
Antioxidants
Cosmetics
Dammar
Dandruff
Dyes
Gelation agents
Glass transition temperature
Gums and Mucilages
Hair preparations
Odor and Odorous substances
Perfumes
Pigments, nonbiological
Preservatives
Propellants (sprays and foams)
Sequestering agents
Solubility
Stabilizing agents
Sunscreens
Surfactants
Thickening agents
(cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Alcohols, biological studies
DNA
Glycosaminoglycans, biological studies
Hydrocarbon oils
Keratins
Lipids, biological studies
Mucopolysaccharides, biological studies
Polyamides, biological studies
Polyesters, biological studies
Polysiloxanes, biological studies
Polyureas
Polyurethanes, biological studies
Proteins
Shellac
Trace elements, biological studies
Vitamins
Waxes
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Metals, biological studies
RL: **COS (Cosmetic use)**; DEV (Device component use); BIOL (Biological study); USES (Uses)
(cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Cosmetics
(creams; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Cosmetics
(emulsions; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Cosmetics
(eye makeups; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Cosmetics
(gels; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Acrylic polymers, biological studies
Polyolefins
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(graft; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Keratins
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(hydrolyzates; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Cosmetics
(lipsticks; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Cosmetics
(mascaras; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Cosmetics
(mousses; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Cosmetics
(nail lacquers; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polyesters, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyamide-; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polyamides, biological studies
Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyester-; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyether-; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyoxyalkylene-; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polyoxyalkylenes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polysiloxane-; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyurea-; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polyureas
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyurethane-; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Cosmetics
(powders; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)
IT Polymerization

(radical; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Resins
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(sandarac; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Acrylic polymers, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(siloxane-, graft; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Proteins
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(soybean; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Cosmetics
(sprays; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT Cosmetics
(sticks; cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT 79-10-7D, Acrylic acid, esters, polymers 79-41-4D, MethAcrylic acid, esters, polymers 107-51-7, Octamethyltrisiloxane 141-62-8, Decamethyltetrasiloxane 540-97-6, Dodecamethylcyclohexasiloxane 541-02-6, Decamethylcyclopentasiloxane 556-67-2, Octamethylcyclotetrasiloxane 1398-61-4, Chitin 1873-90-1, Heptamethylhexyltrisiloxane 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-36-6, Karaya gum 9002-88-4, Polyethylene 9002-89-5, Poly(vinyl alcohol) 9003-07-0, Polypropylene 9003-17-2, Polybutadiene 9003-27-4, Polyisobutylene 9003-31-0, Polyisoprene 9003-39-8, Polyvinylpyrrolidone 9003-53-6, Polystyrene 9003-77-4, Poly(2-ethylhexyl acrylate) 9004-32-4 9004-34-6D, Cellulose, derivs. 9004-58-4, Ethyl hydroxyethyl cellulose 9004-61-9, Hyaluronic acid 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-67-5, Methyl cellulose 9005-12-3, Methylphenylsilanediol homopolymer, SRU 9005-32-7, Alginic acid 9007-28-7, Chondroitin sulfate 9010-79-1, Ethylene-propylene copolymer 9011-16-9, Maleic anhydride-methyl vinyl ether copolymer 9012-76-4, Chitosan 9016-00-6, Polydimethylsiloxane 11138-66-2D, Xanthan, derivs. 17955-88-3, Heptamethyloctyltrisiloxane 25086-89-9, Vinyl acetate-vinylpyrrolidone copolymer 25087-34-7, 1-Butene-Ethylene copolymer 25609-89-6, Crotonic acid-vinyl acetate copolymer 26246-92-4, Poly(dodecyl acrylate) 31230-04-3, Methylphenylsilanediol homopolymer 31807-55-3, Isododecane 31900-57-9, Polydimethylsiloxane 34464-38-5, Isodecane 51987-20-3, VinylCaprolactam-vinylpyrrolidone copolymer 60908-77-2, Isohexadecane 195868-36-1, Phenyl trimethicone 288087-49-0, Kraton Liquid L 1253 850321-51-6, Butylene-ethylene-2-methyl-1-propene copolymer 854262-19-4 854262-20-7
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT 2116-84-9P, Dow Corning 556 56266-37-6P 704890-57-3P 717133-99-8P, Butylene-ethylene-styrene triblock copolymer **848601-63-8P**, 2-Ethylhexyl acrylate-Isobornyl acrylate-isobornyl methacrylate **block** copolymer 855779-77-0P, Isobornyl acrylate-isobornyl methacrylate block copolymer 855786-20-8P, Versagel M 5960
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

IT **848601-63-8P**, 2-Ethylhexyl acrylate-Isobornyl acrylate-isobornyl

methacrylate **block** copolymer
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic compns. comprising dispersion of particles of graft ethylenic polymer and film-forming agent)

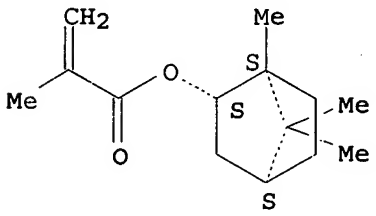
RN 848601-63-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3
CMF C14 H22 O2

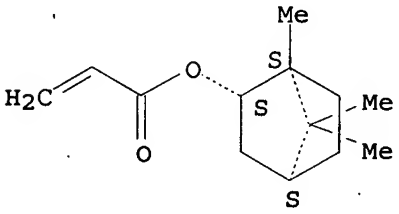
Relative stereochemistry.



CM 2

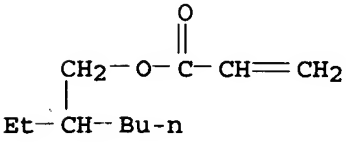
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 3

CRN 103-11-7
CMF C11 H20 O2



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:300212 HCAPLUS
DN 142:360350
TI Cosmetic composition comprising a tensioning agent and a particular block ethylenic polymer for topical application on the skin
IN Vicic, Marco; Cassin, Guillaume
PA L'oreal, Fr.
SO PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005030158	A1	20050407	WO 2004-EP52270	20040922
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FR 2860156	A1	20050401	FR 2003-11338	20030926
PRAI	FR 2003-11338	A	20030926		
	US 2003-508313P	P	20031006		

AB The present invention relates to a cosmetic composition adapted for a topical application on the skin, especially an anti-wrinkle composition in a medium compatible with the skin. Specifically, the composition comprises at least one tensioning agent, the said tensioning agent being present in a content ranging from 0.01% to 20% relative to the total weight of the composition; and at least one non-elastomeric, water-in soluble film-forming linear block ethylenic polymer, the said polymer being present in a content ranging from 0.01% to 20% relative to the total weight of the composition This composition makes it possible to give a remanent tensioning effect to the skin to which it is applied.
IC ICM A61K007-48
CC 62-4 (Essential Oils and **Cosmetics**)
ST cosmetic tensioning agent block ethylenic polymer topical antiwrinkle skin
IT Dispersion (of materials)
(aqueous, of mineral colloidal particle; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Polymers, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(block, ethylenic, non-elastomeric, water-insol. film-forming; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Minerals, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(colloidal particle; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)

IT Acrylic polymers, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(copolymer; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Colloids
Cosmetics
Emulsions
Glass transition temperature
Microparticles
Skin
(cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Polysiloxanes, biological studies
Silicates, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Polydispersity
(index; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Cosmetics
(makeups; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Waxes
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(microparticle; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Fillers
(mineral; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Polymers, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(natural; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Bleaching
(of skin, prevention of; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Latex
Microgels
(plant; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polymer, copolymer; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Embryophyta
(protein; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Skin
(stratum corneum; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Drug delivery systems
(topical; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT Cosmetics
(wrinkle-preventing; cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)
IT 7631-86-9, Colloidal silica, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(colloidal; cosmetic composition comprising tensioning agent and particular

block ethylenic polymer for topical application on skin)

IT 80-62-6, Methyl methacrylate 97-86-9, Isobutyl(meth)acrylate 97-88-1, n-Butyl methacrylate 4513-36-4, Neopentyl acrylate 7534-94-3, Isobornyl (meth)acrylate 9003-21-8, Methyl acrylate homopolymer 9003-77-4, 2-Ethylhexyl acrylate homopolymer 25322-25-2, (Methyl methacrylate Acrylic acid)copolymer 26776-13-6D, Isophthalic acid polymer, sulfonated **27155-22-2** 67290-25-9, (Isobornyl acrylate/methyl methacrylate)copolymer 93858-83-4 **102359-43-3** 118643-51-9 302328-53-6, (Isobornyl acrylate/isobutyl methacrylate)copolymer 848838-00-6
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic composition comprising tensioning agent and particular **block** ethylenic polymer for topical application on skin)

IT **676542-28-2P 676542-29-3P 676542-30-6P 676546-89-7P 676597-60-7P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic composition comprising tensioning agent and particular **block** ethylenic polymer for topical application on skin)

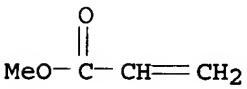
IT 103-11-7, 2-Ethylhexyl acrylate 5888-33-5, Isobornyl acrylate 13052-09-0, 2,5-Bis(2-ethylhexanoylperoxy)-2,5-dimethylhexane 31807-55-3, Isododecane
RL: RCT (Reactant); RACT (Reactant or reagent)
(cosmetic composition comprising tensioning agent and particular block ethylenic polymer for topical application on skin)

IT **27155-22-2 102359-43-3**
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic composition comprising tensioning agent and particular **block** ethylenic polymer for topical application on skin)

RN 27155-22-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

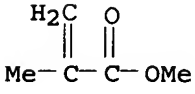
CM 1

CRN 96-33-3
CMF C4 H6 O2



CM 2

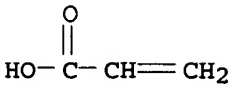
CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7

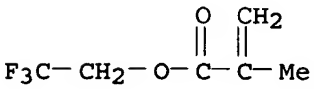
CMF C3 H4 O2



RN 102359-43-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenoic acid and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

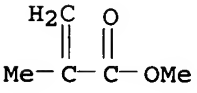
CM 1

CRN 352-87-4
CMF C6 H7 F3 O2



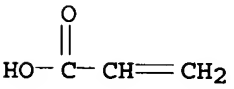
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2

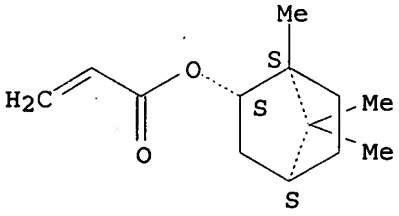


IT **676542-28-2P 676542-29-3P 676542-30-6P**
676546-89-7P 676597-60-7P
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic composition comprising tensioning agent and particular **block** ethylenic polymer for topical application on skin)
RN 676542-28-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

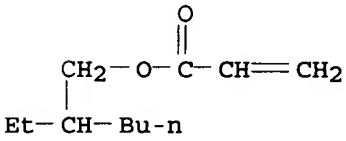
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



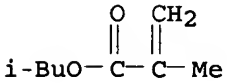
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

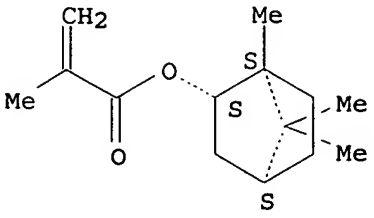


RN 676542-29-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3
CMF C14 H22 O2

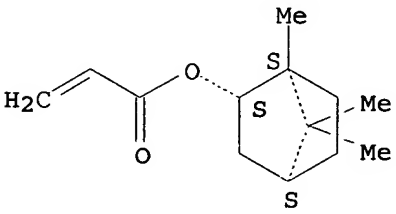
Relative stereochemistry.



CM 2

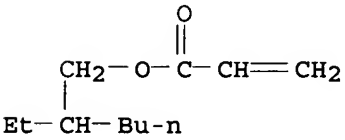
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 3

CRN 103-11-7
CMF C11 H20 O2

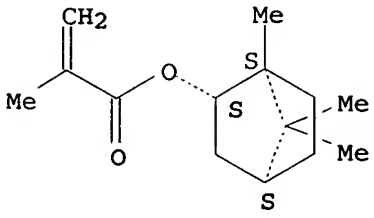


RN 676542-30-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-methylpropyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

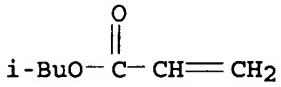
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



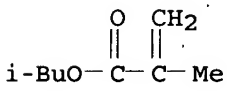
CM 2

CRN 106-63-8
CMF C7 H12 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

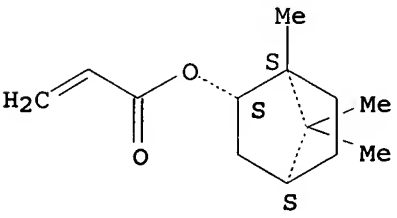


RN 676546-89-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

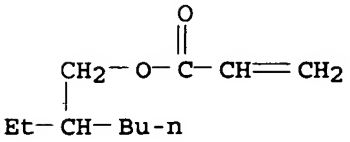
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



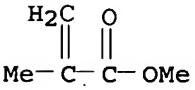
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

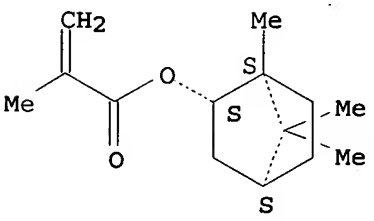


RN 676597-60-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 2-methylpropyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3
CMF C14 H22 O2

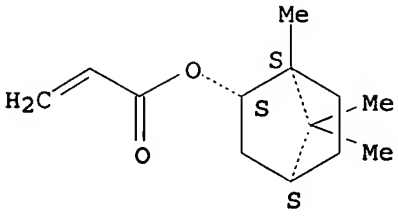
Relative stereochemistry.



CM 2

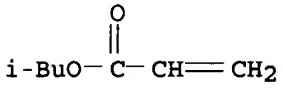
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 3

CRN 106-63-8
CMF C7 H12 O2



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:300209 HCAPLUS
DN 142:360349
TI Continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temperatures
IN Seyler, Nathalie; Candau, Didier
PA L'oreal, Fr.
SO PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005030155	A1	20050407	WO 2004-EP10989	20040915
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FR 2860155	A1	20050401	FR 2003-11308	20030926
PRAI	FR 2003-11308	A	20030926		
	US 2003-516759P	P	20031104		

AB Photoprotectant compns. comprise, in a continuous aqueous phase-based carrier: (a) 1 photoprotectant system capable of screening out UV radiation; (b) a block polymer comprising 1 first block and 1 s block which are incompatible with each other and which have different **glass**

transition temps. (**Tg**), the first and second blocks being linked to each other by an intermediate segment comprising 1 monomer constituting the first block and 1 monomer constituting the second block and the polymer having a polydispersity value of V ≥2. The invention also relates to the use of a block polymer as defined above in a photoprotectant composition comprising, in a continuous aqueous phase-based carrier, 1 photoprotectant system capable of screening out UV radiation, as agent making it possible to increase the sun protection factor (SPF) of the the composition The preparation of block and copolymers is disclosed.

IC ICM A61K007-42

CC 62-4 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 37

ST **glass transition** temp block polymer photoprotectant

IT Surfactants
(amphoteric; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)

IT Surfactants
(anionic; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)

IT Infection
(bacterial; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)

IT Polymers, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(block, diblock; continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temps.)

IT Surfactants
(cationic; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)

IT Anti-inflammatory agents
Antibacterial agents
Antifoaming agents
Antioxidants
Cosmetics
Glass transition temperature
Hair
Hair preparations
Humectants
Inflammation
Insect repellents
Molecular weight distribution
Nail (anatomical)
Opacifiers
Perfumes
Pigments, nonbiological
Polydispersity
Preservatives
Propellants (sprays and foams)
Skin
Stabilizing agents
Sunscreens

Suntanning agents
Thickening agents
UV A radiation
UV B radiation
(continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temps.)
IT Oxides (inorganic), biological studies
Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temps.)
IT Cosmetics
(creams; continuous aqueous phase-based photoprotectant composition containing block
polymers having different **glass transition** temps.)
IT Cosmetics
(emollients; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)
IT Cosmetics
(emulsions; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)
IT Cosmetics
(gels; continuous aqueous phase-based photoprotectant composition containing block
polymers having different **glass transition** temps.)
IT Radicals, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)
IT Cosmetics
(lipsticks; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)
IT Cosmetics
(mousses; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)
IT Cosmetics
(nail lacquers; continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temps.)
IT Surfactants
(nonionic; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)
IT Cosmetics
(sprays; continuous aqueous phase-based photoprotectant composition containing block
polymers having different **glass transition** temps.)
IT Cosmetics
(sticks; continuous aqueous phase-based photoprotectant composition containing block

polymers having different **glass transition** temps.)

IT Sunscreens
(sun protection factor; continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temps.)

IT Surfactants
(zwitterionic; continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temps.)

IT 180898-37-7, Disodium phenyldibenzimidazoletetrasulfonate
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(Disodium phenyldibenzimidazoletetrasulfonate; continuous aqueous phase-based photoprotectant composition containing block polymers having different **glass transition** temps.)

IT 51-17-2D, Benzimidazole, derivs. 69-72-7D, Salicylic acid, derivs. 76-22-2D, Camphor, derivs. 95-14-7D, Benzotriazole, derivs. 100-42-5D, Styrene, alkyl derivs., dimers 106-99-0D, Butadiene, diaryl derivs., dimers 118-60-5, 2-Ethylhexyl Salicylate 118-92-3D, Anthranilic acid, derivs. 119-61-9D, Benzophenone, derivs. 120-46-7D, Dibenzoylmethane, derivs. 131-57-7, Benzophenone-3 150-13-0D, p-Aminobenzoic acid, derivs. 584-45-2D, Benzalmalonic acid, derivs. 606-84-8D, β,β-Diphenylacrylic acid, derivs. 621-82-9D, Cinnamic acid, derivs. 1314-13-2, Zinc oxide, biological studies 1314-23-4, Zirconium oxide, biological studies 1317-70-0, Anatase 1317-80-2, Rutile 1332-37-2, Iron oxide, biological studies 4065-45-6, Benzophenone-4 5466-77-3 6197-30-4, Uvinul N539 6628-37-1, Benzophenone-5 9003-77-4, 2-Ethylhexyl acrylate homopolymer 11129-18-3, Cerium oxide 12654-97-6D, Triazine, derivs. 13463-67-7, Titanium oxide, biological studies 27503-81-7, PhenylbenzimidazoleSulfonic Acid 28299-33-4D, Imidazoline, derivs. 36861-47-9, 4-Methylbenzylidenecamphor 39350-44-2D, Methylenebis(benzotriazole), derivs. 70356-09-1, Parsol 1789 88122-99-0, Ethylhexyltriazone 92761-26-7, Mexoryl SX 154702-15-5, DiethylhexylButamidoTriazone 155633-54-8, Mexoryl XL 191419-26-8, Anisotriazine 302776-68-7, n-Hexyl 2-(4-diethylamino-2-hydroxybenzoyl)benzoate 363602-15-7, 1,1-Dicarboxy(2,2'-dimethylpropyl)-4,4-diphenylbutadiene **848859-96-1**, 2-Ethylhexyl acrylate-isobornyl acrylate-methyl methacrylate **block** copolymer
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(continuous aqueous phase-based photoprotectant composition containing **block** polymers having different **glass transition** temps.)

IT 540-97-6P, Dow Corning 246 **27155-22-2P**, Acrylic acid-methyl acrylate-methyl methacrylate copolymer 29035-74-3P, Butyl acrylate-Butyl methacrylate copolymer **102359-43-3P** 120964-16-1P, Acrylic acid-methyl methacrylate block copolymer 145687-02-1P, Pemulen TR 2 **149341-87-7P**, Acrylic acid-methyl acrylate-methyl methacrylate **block** copolymer **676542-28-2P 676542-31-7P** **848601-62-7P**, 2-Ethylhexyl acrylate-Isobornyl acrylate-isobutyl methacrylate **block** copolymer **848838-01-7P**, Acrylic acid-isobornyl acrylate-methyl acrylate copolymer 848859-98-3P, Isobornyl acrylate-methyl methacrylate block copolymer 848860-00-4P, Isobornyl acrylate-Isobutyl methacrylate block copolymer **848860-08-2P**, Acrylic acid-isobornyl acrylate-methyl acrylate **block** copolymer **848950-23-2P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(continuous aqueous phase-based photoprotectant composition containing **block** polymers having different **glass transition** temps.)

IT 33507-63-0, Substance P 83652-28-2, CGRP
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(inhibitors; continuous aqueous phase-based photoprotectant composition containing
block polymers having different **glass transition** temps.)

IT **848859-96-1**, 2-Ethylhexyl acrylate-isobornyl acrylate-methyl methacrylate **block** copolymer
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(continuous aqueous phase-based photoprotectant composition containing **block** polymers having different **glass transition** temps.)

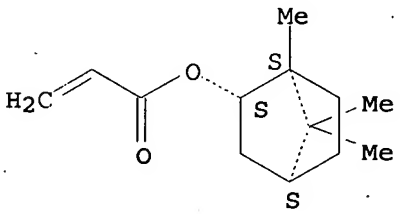
RN 848859-96-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

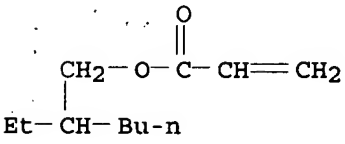
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



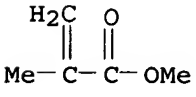
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



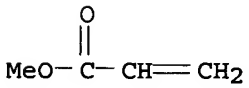
IT **27155-22-2P**, Acrylic acid-methyl acrylate-methyl methacrylate copolymer **102359-43-3P 149341-87-7P**, Acrylic acid-methyl acrylate-methyl methacrylate **block** copolymer

676542-28-2P 676542-31-7P 848601-62-7P,
2-Ethylhexyl acrylate-Isobornyl acrylate-isobutyl methacrylate **block** copolymer **848838-01-7P**, Acrylic acid-isobornyl acrylate-methyl acrylate copolymer **848860-08-2P**, Acrylic acid-isobornyl acrylate-methyl acrylate **block** copolymer **848950-23-2P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(continuous aqueous phase-based photoprotectant composition containing **block** polymers having different **glass transition** temps.)

RN 27155-22-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

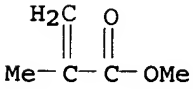
CM 1

CRN 96-33-3
CMF C4 H6 O2



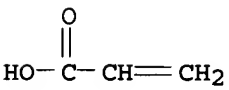
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

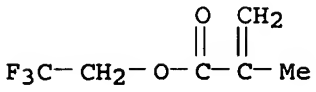
CRN 79-10-7
CMF C3 H4 O2



RN 102359-43-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenoic acid and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

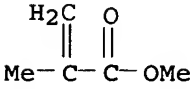
CM 1

CRN 352-87-4
CMF C6 H7 F3 O2



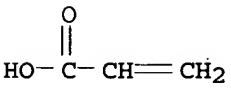
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

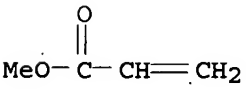
CRN 79-10-7
CMF C3 H4 O2



RN 149341-87-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

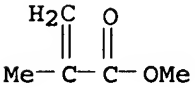
CM 1

CRN 96-33-3
CMF C4 H6 O2



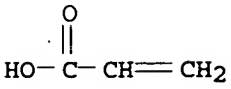
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2

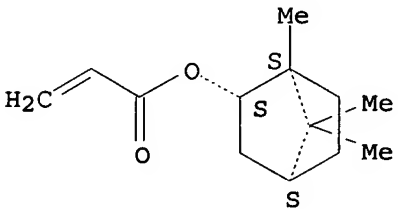


RN 676542-28-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

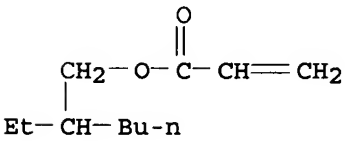
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



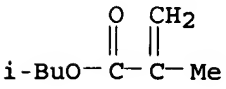
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2



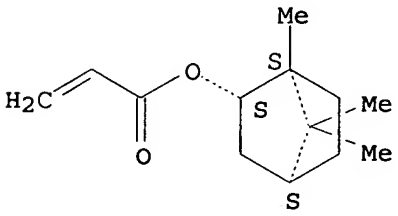
RN 676542-31-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-methylpropyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-

trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

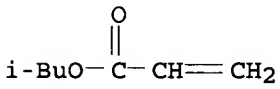
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



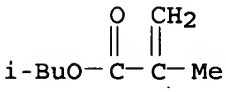
CM 2

CRN 106-63-8
CMF C7 H12 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

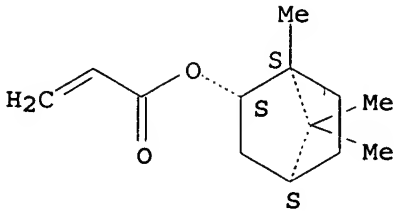


RN 848601-62-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

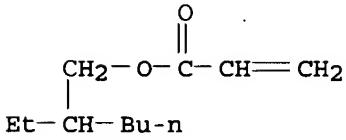
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



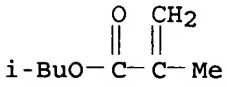
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

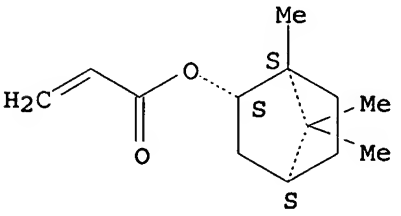


RN 848838-01-7 HCAPLUS
CN 2-Propenoic acid, polymer with methyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

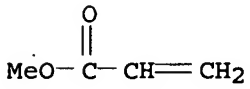
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



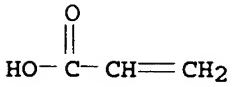
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2

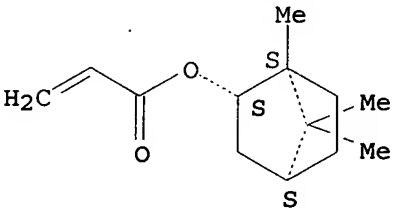


RN 848860-08-2 HCAPLUS
CN 2-Propenoic acid, polymer with methyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

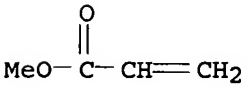
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



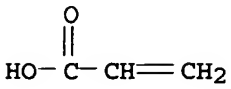
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

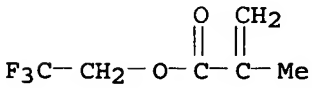
CRN 79-10-7
CMF C3 H4 O2



RN 848950-23-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenoic acid and 2,2,2-trifluoroethyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

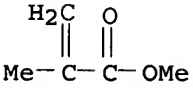
CM 1

CRN 352-87-4
CMF C6 H7 F3 O2



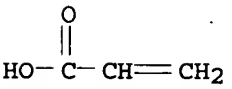
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:280710 HCAPLUS
DN 142:360338
TI Continuous-aqueous-phase photoprotective composition containing a polymer comprising at least two blocks incompatible with one another, and having different **glass transition** temperatures
IN Seyler, Nathalie; Candau, Didier
PA L'oreal, Fr.

SO Fr. Demande, 36 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 2860155	A1	20050401	FR 2003-11308	20030926
WO 2005030155	A1	20050407	WO 2004-EP10989	20040915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI FR 2003-11308	A	20030926	
US 2003-516759P	P	20031104	

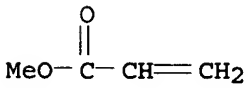
AB A sunscreen composition comprises in a physiol. acceptable support with continuous aqueous phase: (a) a sunscreen able to filter a UV radiation, (b) at least a block copolymer comprising at least a first block and at least a second block incompatible with each other and having different **glass transition** temps. The first and second block are connected by an intermediate segment including at least a monomer constitutive of the first block and at least a monomer constitutive of the second block and the polymer having an index of polydispersity I equal to or higher than 2. Formulation of a sunscreen composition containing iso-Bu methacrylate-isobornyl acrylate-ethyl-2-hexyl acrylate copolymer (preparation given) is disclosed. The sun protection factor of the sunscreen was 23.

IC ICM A61K007-42
CC 62-4 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 35, 38
ST photoprotectant sunscreen acrylic polymer block **glass transition** temp
IT **Glass transition** temperature
Sunscreens
UV radiation
(continuous-aqueous-phase photoprotective composition containing polymer comprising at least two blocks incompatible with one another, and having different **glass transition** temps.)
IT Acrylic polymers, biological studies
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(continuous-aqueous-phase photoprotective composition containing polymer comprising at least two blocks incompatible with one another, and having different **glass transition** temps.)
IT **27155-22-2P** 29035-74-3P **676542-28-2P** **676542-31-7P** **676546-89-7P** 848838-00-6P **848838-01-7P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(continuous-aqueous-phase photoprotective composition containing polymer comprising at least two **blocks** incompatible with one another, and having

different **glass transition** temps.)
IT **27155-22-2P 676542-28-2P 676542-31-7P**
676546-89-7P 848838-01-7P
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(continuous-aqueous-phase photoprotective composition containing polymer comprising
at least two **blocks** incompatible with one another, and having different **glass transition** temps.)
RN 27155-22-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

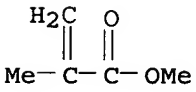
CM 1

CRN 96-33-3
CMF C4 H6 O2



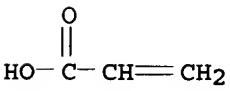
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2

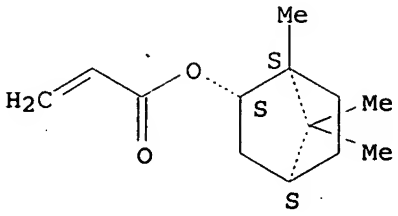


RN 676542-28-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

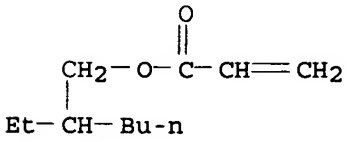
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



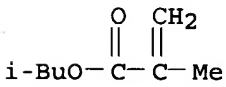
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

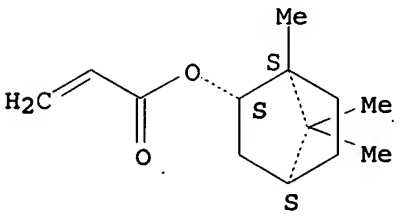


RN 676542-31-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-methylpropyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

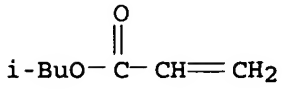
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



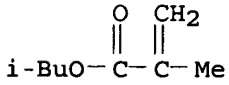
CM 2

CRN 106-63-8
CMF C7 H12 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

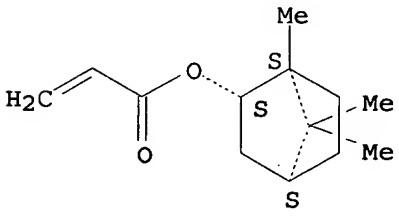


RN 676546-89-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

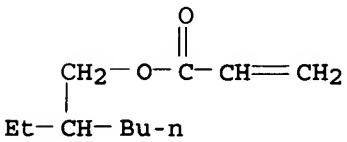
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



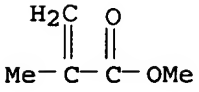
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

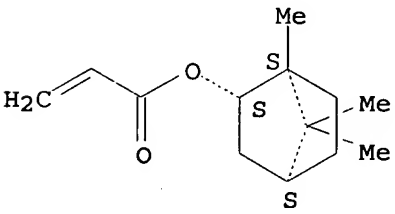


RN 848838-01-7 HCAPLUS
CN 2-Propenoic acid, polymer with methyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

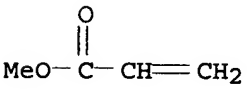
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



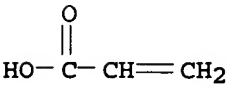
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:275238 HCAPLUS
DN 142:341454
TI Cosmetic compositions comprising a block polymer and a nonvolatile silicone oil
IN Blin, Xavier; Ferrari, Veronique
PA L'oreal, Fr.
SO Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1518535	A1	20050330	EP 2004-292212	20040915
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	FR 2860143	A1	20050401	FR 2003-11337	20030926
	JP 2005104979	A2	20050421	JP 2004-278479	20040924
	US 2005106197	A1	20050519	US 2004-949435	20040927
PRAI	FR 2003-11337	A	20030926		
	US 2004-539351P	P	20040128		

AB Cosmetic compns. comprising an ethylene block polymer and a nonvolatile silicone oil is claimed. A lipstick contained ethyl-2-hexyl acrylate-isobornyl acrylate-isobornyl methacrylate copolymer (preparation given) 50%, isododecane 65, hydrogenated polyisobutylene 2.1, octyldodecanol 0.9, Dow Corning-556C 27.8, Antaron V220 1.2, and pigment 3 g.

IC ICM A61K007-027
ICS A61K007-021
CC 62-4 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 35, 38
ST lipstick polymer nonvolatile silicone oil
IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(Calophyllum; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT Alcohols, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(C16-22; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(Ph, 556C; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(almond; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(apricot seed; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(arara nut; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(avocado; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Alopecia
Antioxidants
Glass transition temperature
Gums and Mucilages
Hair
Hair preparations
Perfumes
Preservatives
Propellants (sprays and foams)
Sequestering agents
Sunscreens
Surfactants
Thickening agents
(cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Canola oil
Castor oil
Corn oil
Cottonseed oil
Jojoba oil
Olive oil
Palm oil
Paraffin oils
Soybean oil
Sunflower oil
Vitamins
Waxes
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(di-Me, di-Ph; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(fluoro; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(grape seed; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Cosmetics
(lipsticks; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(mink; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyoxyalkylene-; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

IT Polyoxyalkylenes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polysiloxane-; cosmetic compns. comprising block polymer and nonvolatile silicone oil)

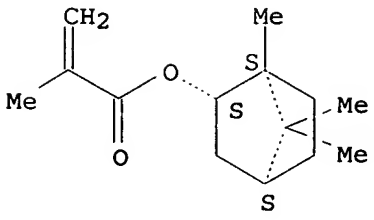
IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(sesame; cosmetic compns. comprising block polymer and nonvolatile

silicone oil)
IT Plastics, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(thermoplastics; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT Fats and Glyceridic oils, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(turtle; cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 60-33-3, Linoleic acid, biological studies 107-51-7, Octamethyltrisiloxane 110-27-0, Isopropyl myristate 111-01-3, Squalane 112-80-1, Oleic acid, biological studies 112-85-6, Behenic acid 123-95-5, Butyl stearate 141-62-8, Decamethyltetrasiloxane 142-91-6, Isopropyl palmitate 463-40-1, Linolenic acid 540-97-6, Dodecamethyl-cyclohexasiloxane 541-02-6, Decamethylcyclopentasiloxane 544-63-8, Myristic acid, biological studies 556-67-2, Octamethylcyclotetrasiloxane 1873-90-1, Heptamethyl-hexyltrisiloxane 2915-57-3, 2-Ethylhexyl succinate 6938-94-9, DiIsopropyl adipate 9002-88-4, Ethylene polymer 9003-27-4D, Polyisobutylene, hydrogenated 9005-12-3, Phenyldimethicone 9016-00-6, Polydimethyl siloxane 13052-09-0, Trigonox 141 17955-88-3, Heptamethyloctyltrisiloxane 22766-83-2, 2-Octyldodecyl myristate 26942-95-0, Glycerin triisostearate 28211-18-9, Antaron V220 29226-39-9D, trimethylsilyl-terminated 29806-73-3, 2-Ethylhexyl palmitate 30399-84-9, Isostearic acid 31807-55-3, Isododecane 31900-57-9, Polydimethylsiloxane 32243-66-6, Diphenylmethyldiphenyltrisiloxane 34316-64-8, Hexyl laurate 34362-27-1, 2-Hexyldecyl laurate 34464-38-5, Isodecane 42131-25-9, Isononyl isononanoate 57568-20-4, 2-Octyldodecyl lactate 60908-77-2, Isohexadecane 81230-05-9, Diisostearyl malate 120486-24-0, DiGlycerin triisostearate 134112-33-7, 2-Octyldecyl palmitate 195868-36-1, Phenyltrimethicone
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic compns. comprising block polymer and nonvolatile silicone oil)
IT **676542-29-3P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic compns. comprising **block** polymer and nonvolatile silicone oil)
IT **676542-29-3P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic compns. comprising **block** polymer and nonvolatile silicone oil)
RN 676542-29-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3
CMF C14 H22 O2

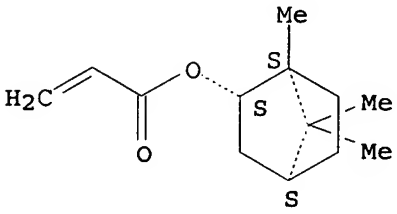
Relative stereochemistry.



CM 2

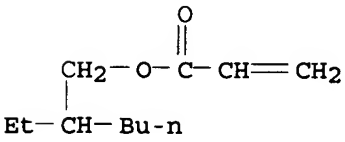
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 3

CRN 103-11-7
CMF C11 H20 O2



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:275237 HCAPLUS
DN 142:341453
TI Bilayered cosmetic product containing a film-forming block copolymer and kit-of-parts containing this product
IN Blin, Xavier; Ferrari, Veronique
PA L'oreal, Fr.
SO Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI EP 1518534 A2 20050330 EP 2004-292148 20040907
EP 1518534 A3 20050706
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
FR 2860142 A1 20050401 FR 2003-11340 20030926
JP 2005126417 A2 20050519 JP 2004-278480 20040924
US 2005095213 A1 20050505 US 2004-949448 20040927
PRAI FR 2003-11340 A 20030926
US 2004-539353P P 20040128

AB The invention relates to a cosmetic product containing a first and a second composition, the first composition comprising, in a cosmetically acceptable organic liquid medium, at least one film-forming linear ethylenic block polymer, and the second composition comprising a cosmetically acceptable medium. The invention also relates to a makeup process and to a makeup kit containing the said product. This product is in particular a lipstick, a mascara or a nail varnish. For example, a block copolymer was prepared from 120 g of isobornyl acrylate, 90 g of iso-Bu methacrylate, and 90 g of 2-ethylhexyl acrylate in isododecane, using 2,5-bis(2-ethylhexanoylperoxy)-2,5-dimethylhexane (Trigonox 141) and 1.2 g of 2,5-bis(2-ethylhexanoylperoxy)-2,5-dimethylhexane catalysts. A polymer comprising a poly(isobornyl acrylate-iso-Bu methacrylate) first block with a **Tg** of 80°, a poly(2-ethylhexyl acrylate) second block with a **Tg** of -70°, and an intermediate block which is an isobornyl acrylate/isobutyl methacrylate/2-ethylhexyl acrylate random polymer was obtained. The polymer has a weight average mass of 77,000 and a number average mass of 19,000, i.e., a polydispersity index I of 4.05. A lip gloss was prepared containing the polymer prepared 90.7%, hydrogenated polyisobutene 2.1%, octyldodecanol 0.9%, Ph trimethicone (DC 556, 20 cSt) 2.1%, vinylpyrrolidone-1-eicosene copolymer (Antaron V-220) 1.2%, and pigments 3%.

IC ICM A61K007-021
ICS A61K007-043
CC 62-4 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 37
ST acrylic block polymer film former bilayered cosmetic
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(SF 1642; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Beeswax
Dyes
Pearlescent pigments
Pigments, nonbiological
(bilayered cosmetics containing film-forming ethylenic block polymers)
IT Carnauba wax
Hydrocarbon oils
Paraffin waxes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(bilayered; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(concealers; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(di-Me, fluoroalkyl Me, X 22-819; bilayered cosmetics containing

film-forming ethylenic block polymers)
IT Cosmetics
(eye liners; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(eye shadows; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(foundations; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Jojoba oil
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(hydrogenated; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Paraffin oils
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(isoparaffin oils, Parleam; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(lipsticks; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(makeups; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(mascaras; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Cosmetics
(nail lacquers; bilayered cosmetics containing film-forming ethylenic block polymers)
IT **Glass transition** temperature
(of polymers; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Candelilla wax
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(reaction products with silicones; bilayered cosmetics containing film-forming ethylenic block polymers)
IT Polyolefins
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(waxes; bilayered cosmetics containing film-forming ethylenic block polymers)
IT 205537-77-5
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(D 2-9085; bilayered cosmetics containing film-forming ethylenic block polymers)
IT 56266-37-6, Allyl stearate-vinyl acetate copolymer
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(Mexomere PQ; bilayered cosmetics containing film-forming ethylenic block polymers)
IT 77-90-7, Tributyl acetyl citrate 2116-84-9, DC 556 4568-28-9, Triethanolamine stearate 5281-04-9, D And C Red 7 Lake 8047-99-2 9002-88-4 9003-27-4D, Polyisobutene, hydrogenated 9003-29-6, Polybutene 9004-70-0, Nitrocellulose 9016-00-6, Polydimethylsiloxane 12227-89-3, Black iron oxide 12691-60-0, Bentone 27V 26246-91-3, Polyvinyl laurate 28211-18-9, Antaron V 220 31692-79-2, Dimethiconol 31900-57-9, Polydimethylsiloxane 34513-50-3, Octyldodecanol 42557-10-8, DC 200
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(bilayered cosmetics containing film-forming ethylenic block polymers)
IT **149341-87-7P**, Acrylic acid-methyl acrylate-methyl methacrylate

block copolymer **848601-62-7P**, 2-Ethylhexyl acrylate-isobornyl acrylate-isobutyl methacrylate **block** copolymer **848601-63-8P**, 2-Ethylhexyl acrylate-isobornyl acrylate-isobornyl methacrylate **block** copolymer **848601-64-9P**, Isobornyl methacrylate-isobutyl acrylate-isobutyl methacrylate **block** copolymer **848601-65-0P**, Isobornyl acrylate-isobornyl methacrylate-isobutyl acrylate **block** copolymer **848601-66-1P**, Isobornyl acrylate-isobutyl acrylate-isobutyl methacrylate **block** copolymer
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation of film-forming linear ethylenic **block** polymers for bilayered cosmetics)

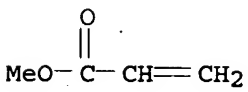
IT 9005-25-8, Starch, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(rice; bilayered cosmetics containing film-forming ethylenic block polymers)

IT **149341-87-7P**, Acrylic acid-methyl acrylate-methyl methacrylate **block** copolymer **848601-62-7P**, 2-Ethylhexyl acrylate-isobornyl acrylate-isobutyl methacrylate **block** copolymer **848601-63-8P**, 2-Ethylhexyl acrylate-isobornyl acrylate-isobornyl methacrylate **block** copolymer **848601-64-9P**, Isobornyl methacrylate-isobutyl acrylate-isobutyl methacrylate **block** copolymer **848601-65-0P**, Isobornyl acrylate-isobornyl methacrylate-isobutyl acrylate **block** copolymer **848601-66-1P**, Isobornyl acrylate-isobutyl acrylate-isobutyl methacrylate **block** copolymer
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation of film-forming linear ethylenic **block** polymers for bilayered cosmetics)

RN 149341-87-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

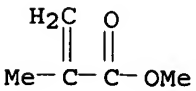
CM 1

CRN 96-33-3
CMF C4 H6 O2



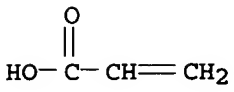
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2

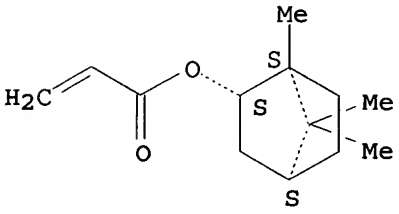


RN 848601-62-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

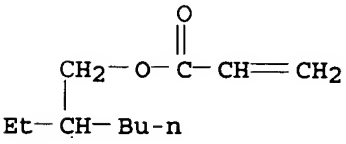
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



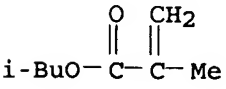
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2



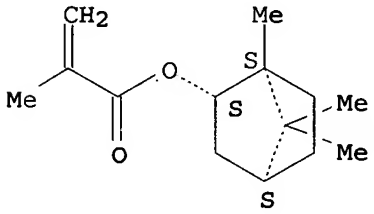
RN 848601-63-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3
CMF C14 H22 O2

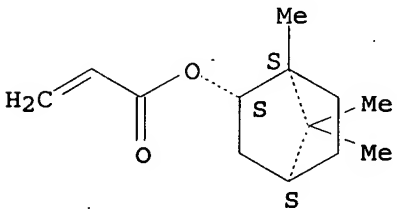
Relative stereochemistry.



CM 2

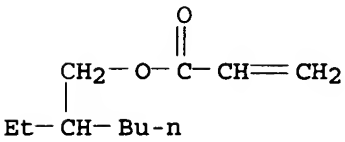
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 3

CRN 103-11-7
CMF C11 H20 O2

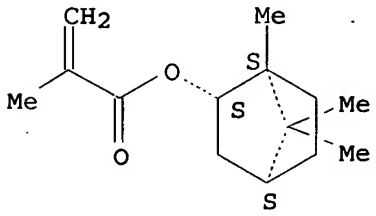


RN 848601-64-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-methylpropyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

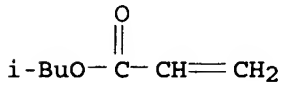
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



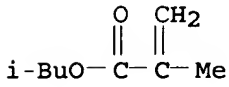
CM 2

CRN 106-63-8
CMF C7 H12 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

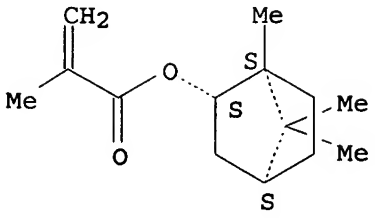


RN 848601-65-0 HCAPLUS
CN 2-Propenoic acid, 2-methylpropyl ester, polymer with rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3
CMF C14 H22 O2

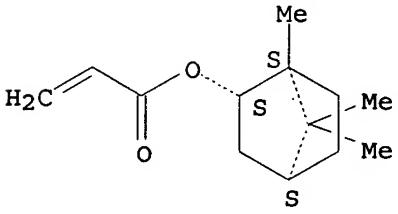
Relative stereochemistry.



CM 2

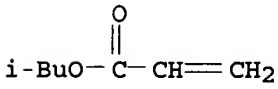
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 3

CRN 106-63-8
CMF C7 H12 O2

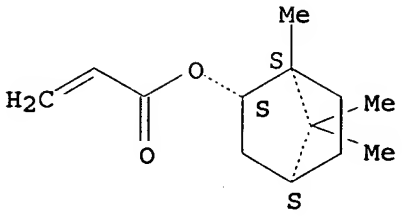


RN 848601-66-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-methylpropyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

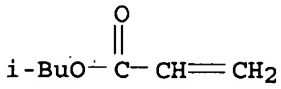
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



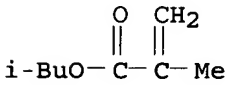
CM 2

CRN 106-63-8
CMF C7 H12 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2



L30 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:819900 HCAPLUS
DN 141:319540
TI Amphiphilic block copolymer compositions and cosmetics containing them
IN Hiwata, Tomoaki; Shibata, Minako; Nishizawa, Satoru; Miura, Kaori
PA Mitsubishi Chemical Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 59 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004277300	A2	20041007	JP 2003-68119	20030313
PRAI JP 2003-68119		20030313		

AB Title compns., useful for hair, nail, or skin cosmetics, contain linear block copolymers showing Mn 1.0 + 103-1.0 + 106, Mw/Mn ≤2.5, and ≤1 **Tg** or m.p. and contain ethylenically unsatd. monomer units and hydrophilic blocks CH2CR1CO2M (R1 = H, Me; M = H, basic compound residue; all M ≠ H) manufactured by atom-transfer radical polymerization using transition metal complex redox catalysts, initiators having radically transferring atoms or atomic groups, and solvents showing dielec. constant (at 25°) 1.50-2.10. The compns. are easily rinsed out with

H2O. A shampoo containing 2-ethylhexyl acrylate-tert-Bu acrylate diblock copolymer hydrolyzate K salt was formulated.

IC ICM A61K007-00
ICS A61K007-021; A61K007-04; A61K007-06; A61K007-075; A61K007-08; A61K007-11; C08F004-40; C08F008-44; C08F246-00; C08F297-00; C08L101-00

CC 62-4 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 35

ST amphiphilic block copolymer cosmetic radical polymn; shampoo polyacrylate block polymn catalyst initiator; solvent polymn amphiphilic block copolymer cosmetic

IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(amino-containing; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Polymerization catalysts
(atom transfer, radical, transition metal complexes; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Polymerization
(atom transfer, radical; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Cosmetics
Hair preparations
Shampoos
(cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Polyoxyalkylenes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(di-Me polysiloxane-, SH 3771; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(di-Me, polyoxyalkylene-, SH 3771; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Solvents
(for polymerization; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Amine oxides
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polymers; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Transition metal complexes
RL: CAT (Catalyst use); USES (Uses)
(polymerization catalysts; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT Hydrocarbons, uses
RL: NUU (Other use, unclassified); USES (Uses)
(polymerization solvents; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT 42557-10-8, BY 11-007
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(SH 200-200CS, BY 11-007; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT 9003-39-8, Luviskol K 90 25086-89-9, Luviskol VA 64 25136-75-8,

Merquat Plus 3330 31900-57-9D, Dimethylsilanediol homopolymer, trimethylsilyl-terminated 55008-57-6, Gafquat 755N **58748-38-2**, Resyn 28-2930 67724-93-0, GantrezES 225 70801-07-9, Amphomer 28-4910 81859-24-7, UCARE Polymer JR 400 87435-36-7, Yukaformer Amphoset 136372-47-9, Yukaformer AM 75R205S 143711-48-2, SM 8702C 150104-73-7, Yukaformer SM 172305-96-3, Diahold LP 503
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetics containing amphiphilic **block** copolymers and optional other polymers)

IT 26316-49-4DP, N,N-Dimethylaminoethyl methacrylate-stearyl methacrylate copolymer, oxidized **118037-65-3DP**, oxidized 723342-48-1DP, tert-Butyl acrylate-2-ethylhexyl acrylate triblock copolymer, hydrolyzed, potassium salts 725241-58-7DP, hydrolyzed, potassium salts
RL: **COS (Cosmetic use)**; IMF (Industrial manufacture); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetics containing amphiphilic **block** copolymers and optional other polymers)

IT 7787-70-4, Copper(I) bromide 7789-45-9, Copper(II) bromide
RL: CAT (Catalyst use); USES (Uses)
(polymerization catalyst; cosmetics containing amphiphilic block copolymers and optional other polymers)

IT 868-73-5, Dimethyl 2,6-dibromoheptanedioate 2052-01-9, 2-Bromoisobutyric acid
RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(polymerization initiator; cosmetics containing amphiphilic block copolymers and optional other polymers)

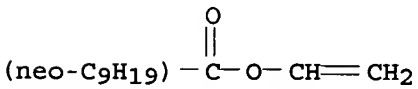
IT **58748-38-2**, Resyn 28-2930
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetics containing amphiphilic **block** copolymers and optional other polymers)

RN 58748-38-2 HCAPLUS

CN Neodecanoic acid, ethenyl ester, polymer with 2-butenoic acid and ethenyl acetate (9CI) (CA INDEX NAME)

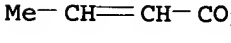
CM 1

CRN 51000-52-3
CMF C12 H22 O2
CCI IDS



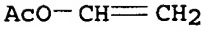
CM 2

CRN 3724-65-0
CMF C4 H6 O2



CM 3

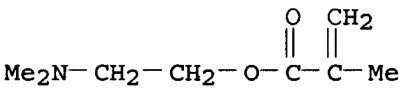
CRN 108-05-4
CMF C4 H6 O2



IT **118037-65-3DP**, oxidized
RL: **COS (Cosmetic use)**; IMF (Industrial manufacture); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetics containing amphiphilic **block** copolymers and optional other polymers)
RN 118037-65-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

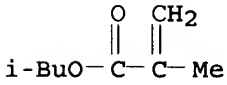
CM 1

CRN 2867-47-2
CMF C8 H15 N O2



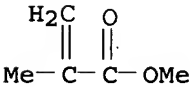
CM 2

CRN 97-86-9
CMF C8 H14 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L30 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:290487 HCAPLUS
DN 140:309002
TI Cosmetic composition comprising a block polymer and a film-forming agent
IN Blin, Xavier; De La Poterie, Valerie; Ferrari, Veronique

applicants

PA L'oreal, Fr.
SO PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004028487	A2	20040408	WO 2003-FR2849	20030926
	WO 2004028487	A3	20040729		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1411069	A2	20040421	EP 2003-292382	20030926
	EP 1411069	A3	20040714		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	EP 1421928	A2	20040526	EP 2003-292383	20030926
	EP 1421928	A3	20040714		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2004149772	A2	20040527	JP 2003-336449	20030926
	CN 1504488	A	20040616	CN 2003-164966	20030926
	US 2004120906	A1	20040624	US 2003-670388	20030926
	US 2004120920	A1	20040624	US 2003-670478	~~20030926~~
	BR 2003003890	A	20040908	BR 2003-3890	20030926
	BR 2003003891	A	20040908	BR 2003-3891	20030926
	JP 2004269497	A2	20040930	JP 2003-336450	20030926
	EP 1545442	A2	20050629	EP 2003-798231	20030926
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI	FR 2002-11949	A	20020926		
	FR 2002-16437	A	20021220		
	FR 2003-6121	A	20030521		
	WO 2003-FR2849	W	20030926		

AB The invention relates to a cosmetic composition comprising, in a cosmetically-acceptable organic liquid medium, at least one film-forming linear ethylene block polymer and another film-forming agent. The aforementioned film-forming agent can be dissolved or dispersed in the organic liquid medium. The inventive composition can contain an aqueous phase, in which case the film-forming agent can be dissolved or dispersed in the aqueous phase. The invention also relates to the way in which the combination of one such block polymer and a film-forming agent can be used to improve the performance of said composition on keratinous materials. A lipstick contained ethyl-2-hexyl acrylate-isobornyl acrylate-isobornyl methacrylate copolymer (preparation given) 50.0, silica 5.0, isododecane gelled by ethylene-propylene-styrene copolymer and butylene-ethylene-styrene copolymer (Versagel MD 970) 7.0, hydrogenated polyisobutene 2.1, octyldodecanol 0.9, phenyltrimethicone 2.1, 1-eicosene-vinylpyrrolidone copolymer 1.2, pigments 3, and fragrance q.s. 100%.

IC ICM A61K007-02
ICS A61K007-42; C08F265-06
CC 62-4 (Essential Oils and **Cosmetics**)

Section cross-reference(s): 38
ST cosmetic block polymer film forming agent
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(Me Ph; cosmetic composition comprising block polymer and film-forming agent)
IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(acrylates; cosmetic composition comprising block polymer and film-forming agent)
IT Polymers, biological studies
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(block; cosmetic composition comprising block polymer and film-forming agent)
IT **Glass transition** temperature
Hair preparations
Sunscreens
(cosmetic composition comprising block polymer and film-forming agent)
IT Polyamides, biological studies
Polyesters, biological studies
Polysiloxanes, biological studies
Polyureas
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic composition comprising block polymer and film-forming agent)
IT Glass, uses
RL: NUU (Other use, unclassified); USES (Uses)
(cosmetic composition comprising block polymer and film-forming agent)
IT Metals, uses
RL: NUU (Other use, unclassified); USES (Uses)
(cosmetic composition comprising block polymer and film-forming agent)
IT Polyesters, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(epoxy; cosmetic composition comprising block polymer and film-forming agent)
IT Cosmetics
(lipsticks; cosmetic composition comprising block polymer and film-forming agent)
IT Cosmetics
(makeups; cosmetic composition comprising block polymer and film-forming agent)
IT Cosmetics
(mascaras; cosmetic composition comprising block polymer and film-forming agent)
IT Polyesters, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyamide-; cosmetic composition comprising block polymer and film-forming agent)
IT Epoxy resins, biological studies
Polyamides, biological studies
Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyester-; cosmetic composition comprising block polymer and film-forming agent)
IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyether-; cosmetic composition comprising block polymer and film-forming agent)
IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)

(polyurea-; cosmetic composition comprising block polymer and film-forming agent)

IT Polyureas
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(polyurethane-; cosmetic composition comprising block polymer and film-forming agent)

IT Plastics, uses
RL: NUU (Other use, unclassified); USES (Uses)
(thermoplastics; cosmetic composition comprising block polymer and film-forming agent)

IT Polyurethanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(vinyl group-containing; cosmetic composition comprising block polymer and film-forming agent)

IT 9000-01-5, Gum arabic 9004-34-6D, Cellulose, cationic, biological studies 9005-12-3, Poly[oxy(methylphenylsilylene)] 9016-00-6, Polydimethylsiloxane 31900-57-9, Polydimethylsiloxane 57271-36-0, Butylene-ethylene-styrene copolymer 676619-29-7, Versagel MD 970
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(cosmetic composition comprising block polymer and film-forming agent)

IT **676542-29-3P 676542-30-6P 676546-89-7P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic composition comprising **block** polymer and film-forming agent)

IT **676542-29-3P 676542-30-6P 676546-89-7P**
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(cosmetic composition comprising **block** polymer and film-forming agent)

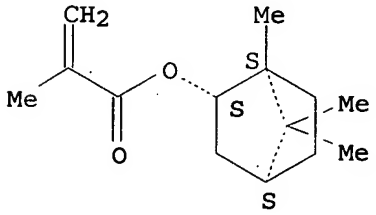
RN 676542-29-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7534-94-3
CMF C14 H22 O2

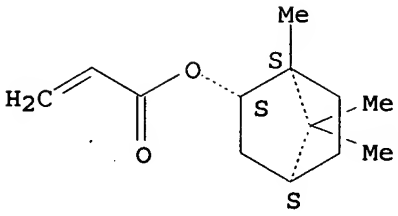
Relative stereochemistry.



CM 2

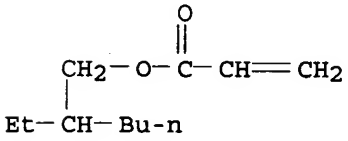
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 3

CRN 103-11-7
CMF C11 H20 O2

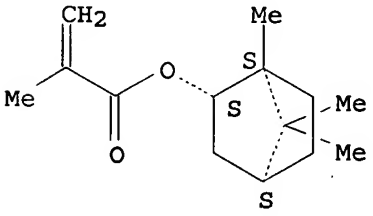


RN 676542-30-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2-methylpropyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

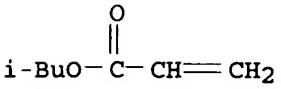
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



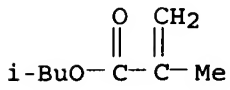
CM 2

CRN 106-63-8
CMF C7 H12 O2



CM 3

CRN 97-86-9
CMF C8 H14 O2

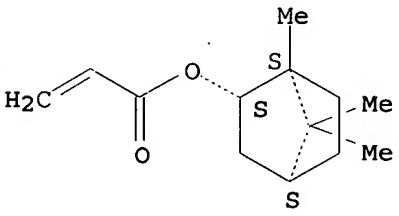


RN 676546-89-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

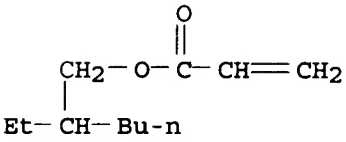
CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



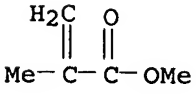
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L30 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:484855 HCAPLUS
DN 137:51995
TI Branched/block copolymers for treatment of keratinous substrates
IN Galleguillos, Ramiro; Smith, David J.; Constantino, Steven A.; Hasman, Daniel F., Jr.
PA PMD Holdings Corp., USA
SO U.S., 29 pp., Cont.-in-part of U.S. Ser. No. 223,664.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6410005	B1	20020625	US 2000-594321	20000615
	WO 2000040628	A1	20000713	WO 1999-US30790	19991222
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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	CA 2412260	AA	20011220	CA 2000-2412260	20000622
	WO 2001096429	A1	20011220	WO 2000-US17161	20000622
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	EP 1290050	A1	20030312	EP 2000-941637	20000622
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	BR 2000015897	A	20030506	BR 2000-15897	20000622
	JP 2004503626	T2	20040205	JP 2002-510561	20000622
PRAI	US 1998-223664	A2	19981230		
	WO 1999-US30790	A2	19991222		
	US 2000-594321	A	20000615		
	WO 2000-US17161	W	20000622		

AB A block copolymer for hair styling compns. includes hydrophilic and hydrophobic blocks which allow for optimization of desirable characteristics of the hair styling composition, such as flow onto the hair, prevention of curl droop, style retention at high humidity, tack, hardness, resistance to flaking, restylability, volumizing, and washability from the hair. The copolymer includes a polyacrylate backbone of hydrophobic blocks, with hydrophilic acrylate side chains. The copolymer is suitable for the formulation of a number personal care, household, hair care, skin care and other formulation. The copolymer is suited to incorporation into low volatile organic compound (VOC) hydro-alc. hair styling compns. to meet reduced VOC regulations. The block copolymers of the present invention unexpectedly improve the cleaning efficiency and effectiveness of a shampoo formulation. This enables the formulator to use lesser amts. of the surfactants and to use milder

surfactants but still maintain an unusually high degree of oil and dirt removal capability. For example, allyl methacrylate-Bu acrylate-methacrylic acid block copolymer was prepared using tert-Bu peroxypivalate (Lupersol-11) as a polymerization initiator and iso-Pr alc./water (80:20) as a solvent. The copolymer prepared was formulated into an aerosol hair spray containing SD 40-200 alc. 25.0%, water 35.0%, the block copolymer 8.0%, aminomethyl propanol (AMP-95) 2.0%, and di-Me ether 30.0%. Upon discharging the product, the spray pattern was excellent, a very fine aerosol mist was obtained.

IC A61K007-06; A61K007-11; A61K007-00; A61K009-00; A61L009-04
INCL 424070100
CC 62-3 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 35, 63
ST acrylic block copolymer hair styling prepn
IT Shaving preparations
(aftershave, gels; film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Polymerization
Polymerization catalysts
(block, radical; preparation of film-forming branched/block copolymers for hair styling prepns. and other uses)
IT Cosmetics
(creams; film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Cosmetics
(emulsions; film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Glycols, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(esters, solvents; preparation of film-forming branched/block copolymers for hair styling prepns.)
IT Glycols, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(ethers, solvents; preparation of film-forming branched/block copolymers for hair styling prepns.)
IT **Glass transition** temperature
Scouring agents
(film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Polishing materials
(furniture; film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Drug delivery systems
(gels, ultrasonic diagnosis; film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Ethers, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(glycol, solvents; preparation of film-forming branched/block copolymers for hair styling prepns.)
IT Cosmetics
(hand sanitizers; film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Hair preparations
(mousses; preparation of film-forming branched/block copolymers for hair styling prepns. and other uses)
IT Drug delivery systems
(ointments; film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)
IT Monomers

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(polyfunctional; preparation of film-forming branched/block copolymers for hair styling prepns. and other uses)

IT Emulsifying agents
Propellants (sprays and foams)
Surfactants
(preparation of film-forming branched/block copolymers for hair styling prepns.)

IT Shampoos
(preparation of film-forming branched/block copolymers for hair styling prepns. and other uses)

IT Acrylic polymers, biological studies
RL: **COS (Cosmetic use)**; PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of film-forming branched/block copolymers for hair styling prepns. and other uses)

IT Alcohols, biological studies
Esters, biological studies
Ethers, biological studies
Glycols, biological studies
Hydrocarbons, biological studies
Petroleum spirits
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(solvents; preparation of film-forming branched/block copolymers for hair styling prepns.)

IT Hair preparations
(sprays; preparation of film-forming branched/block copolymers for hair styling prepns. and other uses)

IT Hair preparations
(styling; preparation of film-forming branched/block copolymers for hair styling prepns. and other uses)

IT 75-91-2, tert-Butyl hydroperoxide 78-67-1, Azobisisobutyronitrile 80-15-9, Cumene hydroperoxide 94-36-0, Benzoyl peroxide, uses 105-64-6, Diisopropyl peroxydicarbonate 110-05-4, Di-tert-butyl peroxide 927-07-1, tert-Butyl peroxypivalate 2895-03-6, Lauryl peroxide 3457-61-2, tert-Butyl cumyl peroxide 4419-11-8 17026-53-8, Ethyl hexyl peroxydicarbonate 26748-41-4, tert-Butyl peroxyneodecanoate 66427-13-2 122460-25-7
RL: CAT (Catalyst use); USES (Uses)
(branched/block copolymers containing polyacrylate backbone for hair styling compns.)

IT 75-09-2, Methylene chloride, biological studies 110-54-3, Hexane, biological studies 110-82-7, Cyclohexane, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(branched/block copolymers containing polyacrylate backbone for hair styling compns.)

IT 64-17-5, Ethyl alcohol, biological studies 67-63-0, Isopropyl alcohol, biological studies 71-43-2, Benzene, biological studies 75-37-6, Dymel 152A 75-65-0, tert-Butyl alcohol, biological studies 79-20-9, Methyl acetate 108-88-3, Toluene, biological studies 115-10-6, Dimethyl ether 123-86-4, Butyl acetate 124-68-5, Amp 95 141-78-6, Ethyl acetate, biological studies 9004-98-2, Emulphor on-870 61641-74-5, Propellant A-46
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(film-forming branched/block copolymers containing polyacrylate backbone for cosmetic and other uses)

IT **178331-91-4P**, Butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid **block** copolymer **283149-27-9P**, Acrylic acid-allyl methacrylate-butyl acrylate **block** copolymer **283149-28-0P**, Allyl methacrylate-butyl acrylate-methacrylic acid

block copolymer 283149-29-1P, Acrylic acid-allyl methacrylate-butyl acrylate-methacrylic acid block copolymer **283149-33-7P**, Allyl methacrylate-2-ethylhexyl acrylate-methacrylic acid **block** copolymer **283149-34-8P**, Allyl methacrylate-ethyl acrylate-methacrylic acid **block** copolymer
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(film-forming branched/**block** copolymers containing polyacrylate backbone for cosmetic and other uses)

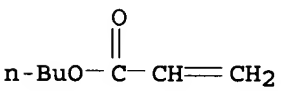
IT **178331-91-4P**, Butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid **block** copolymer **283149-27-9P**, Acrylic acid-allyl methacrylate-butyl acrylate **block** copolymer **283149-28-0P**, Allyl methacrylate-butyl acrylate-methacrylic acid **block** copolymer **283149-33-7P**, Allyl methacrylate-2-ethylhexyl acrylate-methacrylic acid **block** copolymer **283149-34-8P**, Allyl methacrylate-ethyl acrylate-methacrylic acid **block** copolymer
RL: **COS (Cosmetic use)**; SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(film-forming branched/**block** copolymers containing polyacrylate backbone for cosmetic and other uses)

RN 178331-91-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 1,2-ethanediyl bis(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME)

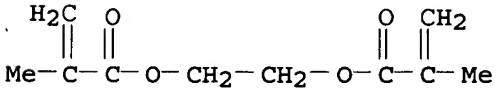
CM 1

CRN 141-32-2
CMF C7 H12 O2



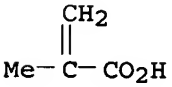
CM 2

CRN 97-90-5
CMF C10 H14 O4



CM 3

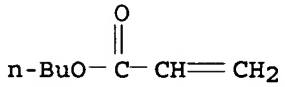
CRN 79-41-4
CMF C4 H6 O2



RN 283149-27-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

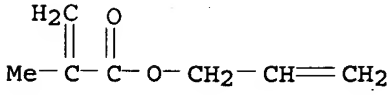
CM 1

CRN 141-32-2
CMF C7 H12 O2



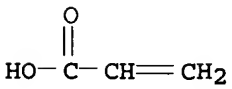
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

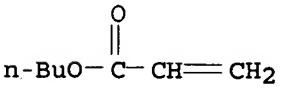
CRN 79-10-7
CMF C3 H4 O2



RN 283149-28-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

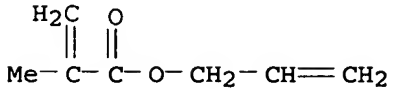
CM 1

CRN 141-32-2
CMF C7 H12 O2



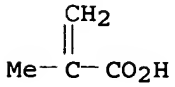
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

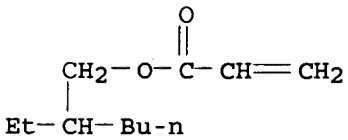
CRN 79-41-4
CMF C4 H6 O2



RN 283149-33-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

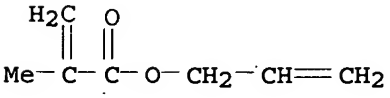
CM 1

CRN 103-11-7
CMF C11 H20 O2



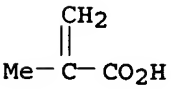
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2

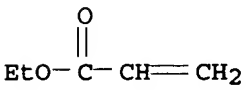


RN 283149-34-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

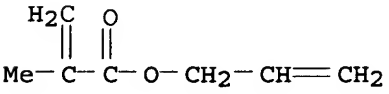
CM 1

CRN 140-88-5
CMF C5 H8 O2



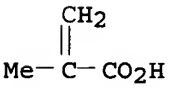
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:275758 HCAPLUS
DN 136:299460
TI Cosmetic and personal care compositions based on elastomeric block copolymers
IN Frechet, Jean Mj; Hajduk, Damian; Khoshdel, Ezat; Liu, Mingjun; Nielsen, Ralph B.; Reid, Euan Stuart; Rutherford, Keith Leslie
PA Unilever PLC, UK; Unilever NV; Hindustan Lever Limited
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002028358	A1	20020411	WO 2001-EP11312	20010927

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU	2002012295	A5	20020415	AU 2002-12295	20010927
EP	1322279	A1	20030702	EP 2001-980456	20010927
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR	2001014370	A	20031209	BR 2001-14370	20010927
JP	2004510720	T2	20040408	JP 2002-531984	20010927
US	2002160026	A1	20021031	US 2001-969900	20011003
US	6663855	B2	20031216		
US	2002159965	A1	20021031	US 2001-969924	20011003
US	6685925	B2	20040203		
US	2004096411	A1	20040520	US 2003-698067	20031030
US	6890522	B2	20050510		
PRAI GB	2000-24182	A	20001003		
US	2000-678085	A	20001003		
GB	2000-28604	A	20001123		
GB	2000-28605	A	20001123		
WO	2001-EP11312	W	20010927		
US	2001-969900	A1	20011003		

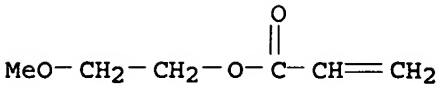
AB Cosmetic or personal care compns., such as for styling hair, comprise a thermoplastic elastomer which is a block copolymer comprising a core polymer having a backbone comprising at least a proportion of C-C bonds and two or more flanking polymers. Each flanking polymer is covalently bound to an end of the core polymer and the core polymer and/or at least one of the flanking polymers is a copolymer derived from two or more monomers. The compns. further comprise a cosmetically acceptable diluent or carrier. For example, a styling mousse was formulated containing, e.g., block copolymer of acrylic acid (AA), Me methacrylate (MMA), and 2-methoxyethyl acrylate (MEA), i.e., (MMA-co-AA)-MEA-(MMA-co-AA) copolymer, 1.5%, silicone emulsion X2 1787 1.2%, Volpo CS 50 0.3%, Sepicide LD 0.4%, Cremophor RH410 0.2%, ethanol 7.5%, CAP 40 8.0%, perfume 0.2%, and water up to 100% (all by weight).

IC ICM A61K007-06
CC 62-3 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 39
ST acrylic thermoplastic rubber hair styling prepn
IT Alcohols, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(C16-18, ethoxylated, Volpo CS 50; hair prepns. containing elastomeric block copolymers)
IT Hair preparations
(creams, styling; hair prepns. containing elastomeric block copolymers)
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(di-Me, 3-hydroxypropyl Me, ethers with polyethylene glycol mono-Me ether; hair prepns. containing elastomeric block copolymers)
IT Polysiloxanes, biological studies
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene glycol mono-Bu ether; hair prepns. containing elastomeric block copolymers)
IT Hair preparations
(gels, styling; hair prepns. containing elastomeric block copolymers)
IT Odor and Odorous substances
Perfumes
Propellants (sprays and foams)

Surfactants
Thickening agents
(hair prepns. containing elastomeric block copolymers)
IT Human
(hair prepns. containing elastomeric block copolymers for human hair)
IT Hair preparations
(mousses; hair prepns. containing elastomeric block copolymers)
IT Flexibility
Glass transition temperature
Molecular weight
Viscosity
Young's modulus
(preparation and properties of elastomeric block copolymers for hair prepns.)
IT Acrylic rubber
Thermoplastic rubber
RL: **COS (Cosmetic use)**; PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and properties of elastomeric block copolymers for hair prepns.)
IT Hair preparations
(sprays; hair prepns. containing elastomeric block copolymers)
IT 64-17-5, Ethanol, biological studies 61641-74-5, CAP 40 138757-67-2, Carbopol 980
RL: **COS (Cosmetic use)**; BIOL (Biological study); USES (Uses)
(hair prepns. containing elastomeric block copolymers)
IT **408504-47-2P 408504-48-3P** 408504-49-4P
408504-50-7P
RL: **COS (Cosmetic use)**; PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation and properties of elastomeric **block** copolymers for hair prepns.)
IT 3121-61-7, 2-Methoxyethyl acrylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and properties of elastomeric block copolymers for hair prepns.)
IT 28628-64-0P, Poly(2-methoxyethyl acrylate)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and properties of elastomeric block copolymers for hair prepns.)
IT **408504-47-2P 408504-48-3P 408504-50-7P**
RL: **COS (Cosmetic use)**; PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation and properties of elastomeric **block** copolymers for hair prepns.)
RN 408504-47-2 HCAPLUS
CN 2-Propenoic acid, 1,1-dimethylethyl ester, polymer with N,N-dimethyl-2-propenamide and 2-methoxyethyl 2-propenoate, block (9CI) (CA INDEX NAME)

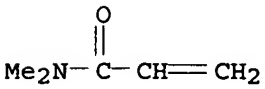
CM 1

CRN 3121-61-7
CMF C6 H10 O3



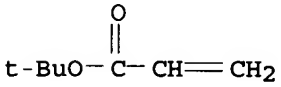
CM 2

CRN 2680-03-7
CMF C5 H9 N O



CM 3

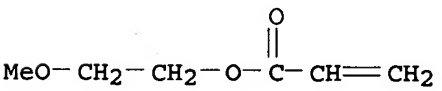
CRN 1663-39-4
CMF C7 H12 O2



RN 408504-48-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N,N-dimethyl-2-propenamide and 2-methoxyethyl 2-propenoate, block (9CI) (CA INDEX NAME)

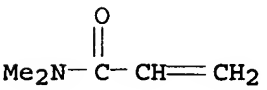
CM 1

CRN 3121-61-7
CMF C6 H10 O3



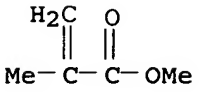
CM 2

CRN 2680-03-7
CMF C5 H9 N O



CM 3

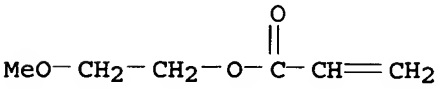
CRN 80-62-6
CMF C5 H8 O2



RN 408504-50-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-methoxyethyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

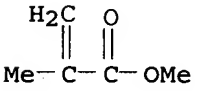
CM 1

CRN 3121-61-7
CMF C6 H10 O3



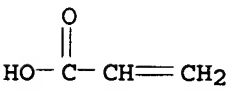
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:923880 HCAPLUS
DN 136:38072
TI Preparation of branched/block copolymers for treatment of keratinous substrates
IN Galleguillos, Ramiro; Smith, David J.; Constantino, Steven A.; Hasman, Daniel F., Jr.
PA Noveon IP Holdings Corp., USA

SO PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001096429	A1	20011220	WO 2000-US17161	20000622
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6410005	B1	20020625	US 2000-594321	20000615
	CA 2412260	AA	20011220	CA 2000-2412260	20000622
	EP 1290050	A1	20030312	EP 2000-941637	20000622
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	BR 2000015897	A	20030506	BR 2000-15897	20000622
	JP 2004503626	T2	20040205	JP 2002-510561	20000622
PRAI	US 2000-594321	A	20000615		
	US 1998-223664	A2	19981230		
	WO 1999-US30790	A2	19991222		
	WO 2000-US17161	W	20000622		

AB A block copolymer for hair styling compns. includes hydrophilic and hydrophobic blocks which allow for optimization of desirable characteristics of the hair styling composition, such as flow onto the hair, prevention of curl droop, style retention at high humidity, tack, hardness, resistance to flaking, re-stylability, volumizing, and washability from the hair. The copolymer includes a polyacrylate backbone of hydrophobic blocks, with hydrophilic acrylate side chains. The copolymer is suitable for the formulation of a number of personal care, household, hair care, skin care and other formulations. The copolymer is suited to incorporation into low VOC hydro-alc. hair styling compns. to meet reduced VOC regulations. Thus, a block copolymer prepared by a two-stage polymerization of (a) a monomer composition comprising acrylic acid 216.00, Bu acrylate 1386.00, and allyl methacrylate 36.00, and (b) a second monomer composition comprising acrylic acid 1944.00 and allyl methacrylate 18.00 g, in presence of Lupersol-11 18 g and IPA/water solvent 2400 g showed two **glass transition** temps. (-13.7° and 97°) and the polymer was formulated with ethanol, Amp 95 and deionized water to form a hair-styling composition

IC ICM C08F265-04
ICS C08F291-00; A61K007-06; C08F293-00; C08L051-00; C08L053-00
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): **62**
ST block copolymer radical polymn two stage prepn; hair styling block copolymer formulation keratinous substrate
IT Vinyl compounds, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aryl, polymers, sulfonic acid derivative; preparation of branched/block copolymers for treatment of hair styling compns.)
IT Cosmetics
Hair preparations

(preparation of branched/block copolymers for treatment of hair styling compns.)

IT **178331-91-4P**, Butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid **block** copolymer **283149-27-9P**, Acrylic acid-allyl methacrylate-butyl acrylate **block** copolymer **283149-28-0P**, Allyl methacrylate-butyl acrylate-methacrylic acid **block** copolymer 283149-29-1P, Acrylic acid-allyl methacrylate-butyl acrylate-methacrylic acid block copolymer **283149-33-7P**, Allyl methacrylate-2-ethylhexyl acrylate-methacrylic acid **block** copolymer **283149-34-8P**, Allyl methacrylate-ethyl acrylate-methacrylic acid **block** copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of branched/**block** copolymers for treatment of hair styling compns.)

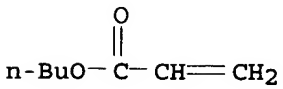
IT **178331-91-4P**, Butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid **block** copolymer **283149-27-9P**, Acrylic acid-allyl methacrylate-butyl acrylate **block** copolymer **283149-28-0P**, Allyl methacrylate-butyl acrylate-methacrylic acid **block** copolymer **283149-33-7P**, Allyl methacrylate-2-ethylhexyl acrylate-methacrylic acid **block** copolymer **283149-34-8P**, Allyl methacrylate-ethyl acrylate-methacrylic acid **block** copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of branched/**block** copolymers for treatment of hair styling compns.)

RN 178331-91-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 1,2-ethanediyl bis(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME)

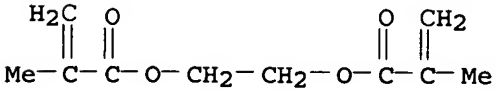
CM 1

CRN 141-32-2
CMF C7 H12 O2



CM 2

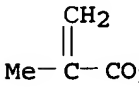
CRN 97-90-5
CMF C10 H14 O4



CM 3

CRN 79-41-4

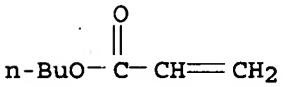
CMF C4 H6 O2



RN 283149-27-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

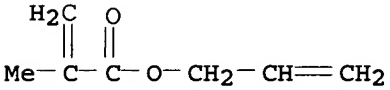
CM 1

CRN 141-32-2
CMF C7 H12 O2



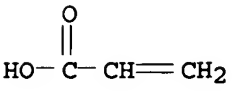
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

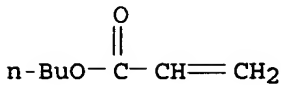
CRN 79-10-7
CMF C3 H4 O2



RN 283149-28-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

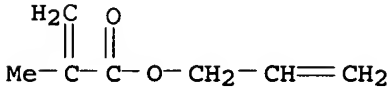
CM 1

CRN 141-32-2
CMF C7 H12 O2



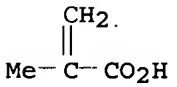
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

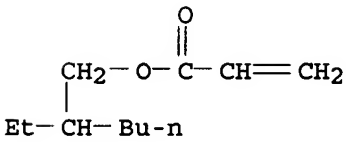
CRN 79-41-4
CMF C4 H6 O2



RN 283149-33-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

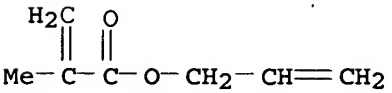
CM 1

CRN 103-11-7
CMF C11 H20 O2



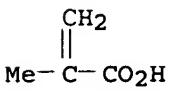
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

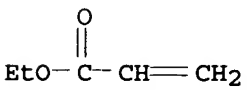
CRN 79-41-4
CMF C4 H6 O2



RN 283149-34-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

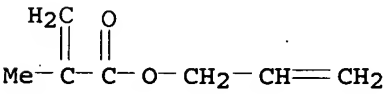
CM 1

CRN 140-88-5
CMF C5 H8 O2



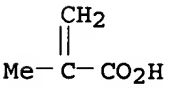
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:475706 HCAPLUS
DN 133:109627
TI Branched/block copolymers for hair styling compositions
IN Galleguillos, Ramiro; Smith, David J.; Constantino, Steven P.
PA The B.F. Goodrich Company, USA
SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000040628	A1	20000713	WO 1999-US30790	19991222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2356751	AA	20000713	CA 1999-2356751	19991222
EP 1141056	A1	20011010	EP 1999-967580	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9916716	A	20020604	BR 1999-16716	19991222
JP 2002534540	T2	20021015	JP 2000-592336	19991222
US 6410005	B1	20020625	US 2000-594321	20000615
ZA 2002009667	A	20031029	ZA 2002-9667	20021128
PRAI US 1998-223664	A	19981230		
WO 1999-US30790	W	19991222		

AB A block copolymer for hair styling compns. includes hydrophilic and hydrophobic blocks which allow for optimization of desirable characteristics of the hair styling composition, such as style retention at high humidity, tack, hardness, resistance to flaking, and washability from the hair. The copolymer includes a polyacrylate backbone of hydrophobic blocks, with hydrophilic acrylate side chains. The copolymer is suitable for the formulation of a number personal care, household, hair care, skin care and other formulation. The copolymer is suitable for incorporation into low VOC aqueous-alc. hair styling compns. to meet reduced VOC regulations. Thus, a block copolymer (I) was prepared from acrylic acid, allyl methacrylate and Bu acrylate and characterized. A hair styling composition contained I 3.00, EtOH 50.00, aminomethylpropanol 0.30, and water 46.70%.

IC ICM C08F265-04
ICS C08F291-00; A61K007-06
CC 62-3 (Essential Oils and **Cosmetics**)
Section cross-reference(s): 37
ST acrylate methacrylate block copolymer hair styling prepn
IT Glycols, uses
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(esters; preparation of branched/block copolymers for hair styling compns.)
IT Polishing materials
(furniture; preparation of branched/block copolymers for hair styling compns.)
IT Hair preparations
(gels; preparation of branched/block copolymers for hair styling compns.)
IT Cosmetics
Glass transition temperature
Hair preparations
Polymerization catalysts
Shampoos
(preparation of branched/block copolymers for hair styling compns.)
IT Alcohols, uses

Esters, uses
Ethers, uses
Glycols, uses
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(preparation of branched/block copolymers for hair styling compns.)

IT Hair preparations
(sprays; preparation of branched/block copolymers for hair styling compns.)

IT 121509-44-2P, Ethylene glycol dimethacrylate-methacrylic acid block copolymer **178331-91-4P**, Butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid **block** copolymer **283149-27-9P**, Acrylic acid-allyl methacrylate-butyl acrylate **block** copolymer **283149-28-0P**, Allyl methacrylate-butyl acrylate-methacrylic acid **block** copolymer 283149-30-4P, Acrylic acid-allyl methacrylate block copolymer 283149-31-5P, Allyl methacrylate-methacrylic acid block copolymer **283149-32-6P**, Acrylic acid-allyl methacrylate-methacrylic acid **block** copolymer **283149-33-7P**, Allyl methacrylate-2-ethylhexyl acrylate-methacrylic acid **block** copolymer **283149-34-8P**, Allyl methacrylate-ethyl acrylate-methacrylic acid **block** copolymer
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation of branched/**block** copolymers for hair styling compns.)

IT 283149-29-1P, Acrylic acid-allyl methacrylate-butyl acrylate-methacrylic acid block copolymer
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of branched/block copolymers for hair styling compns.)

IT 75-91-2, tert-Butyl hydroperoxide 78-67-1, Azobisisobutyronitrile 80-15-9, Cumene hydroperoxide 94-36-0, Benzoyl peroxide, uses 105-64-6, Diisopropyl peroxydicarbonate 110-05-4 927-07-1, Lupersol-11 2895-03-6, Lauryl peroxide 3457-61-2, tert-Butyl cumyl peroxide 4419-11-8 13472-08-7 17026-53-8, Ethyl hexyl peroxydicarbonate 26748-41-4, tert-Butyl peroxyneodecanoate
RL: CAT (Catalyst use); USES (Uses)
(preparation of branched/block copolymers for hair styling compns.)

IT 64-17-5, Ethanol, uses 67-63-0, 2-Propanol, uses 71-43-2, Benzene, uses 75-09-2, Methylene chloride, uses 75-65-0, tert-Butyl alcohol, uses 79-20-9 108-88-3, Toluene, uses 110-54-3, Hexane, uses 110-82-7, CycloHexane, uses 123-86-4, Butyl acetate 141-78-6, Acetic acid ethyl ester, uses
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(preparation of branched/block copolymers for hair styling compns.)

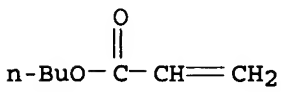
IT **178331-91-4P**, Butyl acrylate-ethylene glycol dimethacrylate-methacrylic acid **block** copolymer **283149-27-9P**, Acrylic acid-allyl methacrylate-butyl acrylate **block** copolymer **283149-28-0P**, Allyl methacrylate-butyl acrylate-methacrylic acid **block** copolymer **283149-32-6P**, Acrylic acid-allyl methacrylate-methacrylic acid **block** copolymer **283149-33-7P**, Allyl methacrylate-2-ethylhexyl acrylate-methacrylic acid **block** copolymer **283149-34-8P**, Allyl methacrylate-ethyl acrylate-methacrylic acid **block** copolymer
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation of branched/**block** copolymers for hair styling compns.)

RN 178331-91-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 1,2-ethanediyl bis(2-methyl-2-propenoate), block (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2



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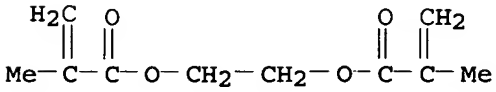
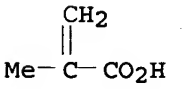
CRN 97-90-5
CMF C10 H14 O4



CM 3

CRN 79-41-4
CMF C4 H6 O2



RN 283149-27-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

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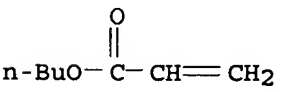
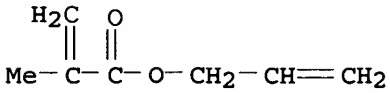
CRN 141-32-2
CMF C7 H12 O2



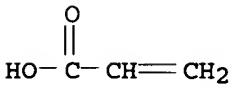
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



RN 283149-28-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

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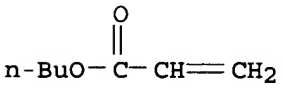
CRN 141-32-2
CMF C7 H12 O2



CM 2

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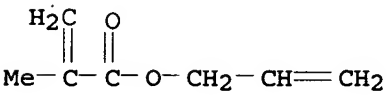
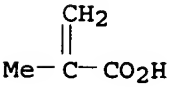
CMF C7 H10 O2



CM 3

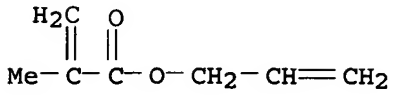
CRN 79-41-4
CMF C4 H6 O2



RN 283149-32-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-propenoic acid and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

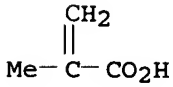
CM 1

CRN 96-05-9
CMF C7 H10 O2



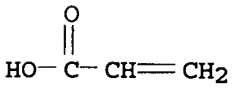
CM 2

CRN 79-41-4
CMF C4 H6 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



RN 283149-33-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

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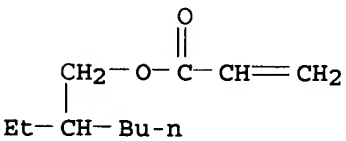
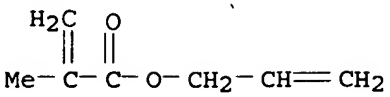
CRN 103-11-7
CMF C11 H20 O2



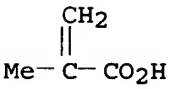
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

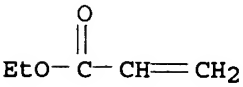
CRN 79-41-4
CMF C4 H6 O2



RN 283149-34-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5
CMF C5 H8 O2



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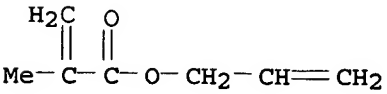
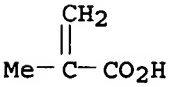
CMF C7 H10 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L9        310239 SEA FILE=REGISTRY ABB=ON  PACR/PCT
L11        75720 SEA FILE=REGISTRY ABB=ON  L9 AND 3/NC
L14        48289 SEA FILE=REGISTRY ABB=ON  L11 NOT 46.150.18/RID
L16        44419 SEA FILE=REGISTRY ABB=ON  L14 NOT 1.30.1/RID
L17        35664 SEA FILE=REGISTRY ABB=ON  L16 NOT (PM/PCT OR OTHER/PCT OR
                 PUR/PCT)
L18        31845 SEA FILE=REGISTRY ABB=ON  L17 NOT SALT
L19        28735 SEA FILE=REGISTRY ABB=ON  L18 NOT (1-20/P,SI)
L20        44470 SEA FILE=HCAPLUS ABB=ON  L19
L23          801 SEA FILE=HCAPLUS ABB=ON  L20(L)(BLOCK? OR TRIBLOCK?)
L24           79 SEA FILE=HCAPLUS ABB=ON  L23 AND (TG OR GLASS TRANSITION)
L25        15377 SEA FILE=HCAPLUS ABB=ON  L20(L)PREP/RL
L26           57 SEA FILE=HCAPLUS ABB=ON  L24 AND L25
L27           12 SEA FILE=HCAPLUS ABB=ON  L26 AND COSMETIC?/SC,SX
L28           12 SEA FILE=HCAPLUS ABB=ON  L24 AND COSMETIC?/SC,SX
L29           10 SEA FILE=HCAPLUS ABB=ON  L26 AND COS/RL
L30           12 SEA FILE=HCAPLUS ABB=ON  (L27 OR L28 OR L29)
L33        69983 SEA FILE=REGISTRY ABB=ON  80-62-6/CRN
L35         2014 SEA FILE=REGISTRY ABB=ON  5888-33-5/CRN
L37         1560 SEA FILE=REGISTRY ABB=ON  7534-94-3/CRN
L39          165 SEA FILE=REGISTRY ABB=ON  38785-10-3/CRN
L41        43851 SEA FILE=REGISTRY ABB=ON  141-32-2/CRN
L43        17539 SEA FILE=REGISTRY ABB=ON  103-11-7/CRN
L44         8320 SEA FILE=REGISTRY ABB=ON  L19 AND (L33 OR L35 OR L37 OR L39 OR
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L45         8210 SEA FILE=REGISTRY ABB=ON  L44 NOT 1-3/M
L52         1975 SEA FILE=REGISTRY ABB=ON  1663-39-4/CRN
L54         3112 SEA FILE=REGISTRY ABB=ON  585-07-9/CRN
L55         8048 SEA FILE=REGISTRY ABB=ON  L45 NOT (L52 OR L54)
L56        21600 SEA FILE=HCAPLUS ABB=ON  L55
L57          217 SEA FILE=HCAPLUS ABB=ON  L56(L)PREP/RL(L)(BLOCK OR TRIBLOCK)
L58           35 SEA FILE=HCAPLUS ABB=ON  L57 AND (TG OR GLASS TRANSITION?)
L61        56950 SEA FILE=REGISTRY ABB=ON  79-10-7/CRN
L66         4126 SEA FILE=REGISTRY ABB=ON  L19 AND  L61
L67         4066 SEA FILE=REGISTRY ABB=ON  L66 NOT 1-3/M
L68         4015 SEA FILE=REGISTRY ABB=ON  L67 NOT (L52 OR L54)
L69        11201 SEA FILE=HCAPLUS ABB=ON  L68
L70           67 SEA FILE=HCAPLUS ABB=ON  L69(L)PREP/RL(L)(BLOCK OR TRIBLOCK)
L71       119347 SEA FILE=HCAPLUS ABB=ON  (TG OR GLASS TRANSITION)
L72           11 SEA FILE=HCAPLUS ABB=ON  L70 AND L71
L73           24 SEA FILE=HCAPLUS ABB=ON  (L72 OR L58) NOT L30
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24 more CA references limited to claim 15 components or acrylic acid. NOT limited to cosmetic use

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=> d l73 bib abs hitind hitstr 1-24

L73  ANSWER 1 OF 24  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:857647  HCAPLUS
DN   141:332971
TI   Manufacture of acrylic films from block copolymers
IN   Guerret, Olivier; Gerard, Pierre
PA   Atofina, Fr.
SO   PCT Int. Appl., 29 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI WO 2004087796 A1 20041014 WO 2004-FR713 20040323
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
FR 2852963 A1 20041001 FR 2003-3681 20030326
FR 2852961 A1 20041001 FR 2003-11174 20030924
PRAI FR 2003-3681 A 20030326
FR 2003-11174 A 20030924

AB Films with thickness 40-300 μm, haze <2%, and breaking elongation >50% are manufactured by extrusion of compns. containing 95-100% ≥1 (A)m(B)n block copolymers (n ≥2, m ≤ n) and 0-5% ≥1 A polymer, B polymer block being directly bonded to a core polymer prepared by polymerization of a monomer mixture containing ≥60% acrylic compds. in the presence of alkoxyamines having ≥1 aminoxy group bonded to an organic or mineral radical having mol. weight ≥14 g/mol bonded to the O through a carbonylalkyl or aryl group such as (EtO)2P(:O)CHMeN(CMe3)OCHMeCO2(CH2)6OC OCHMeON(CMe3)CH(CMe3)P(:O)(OEt)2, with the A polymer block being prepared by polymerization of a mixture containing ≥60% methacrylic compds.. Block B has **Tg** <0° and represents 10-50% of the copolymer.

IC ICM C08J005-18
ICS C08F297-00; C08F293-00
CC 37-3 (Plastics Manufacture and Processing)

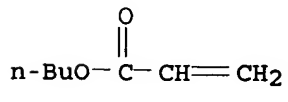
IT **135028-55-6P**, Butyl acrylate-methacrylic acid-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); **PREP (Preparation)**
(manufacture of transparent ductile acrylic extruded films from **block** copolymers prepared in presence of alkoxyamine catalysts)

IT **135028-55-6P**, Butyl acrylate-methacrylic acid-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); **PREP (Preparation)**
(manufacture of transparent ductile acrylic extruded films from **block** copolymers prepared in presence of alkoxyamine catalysts)

RN 135028-55-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

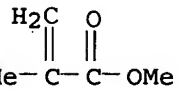
CRN 141-32-2
CMF C7 H12 O2



CM 2

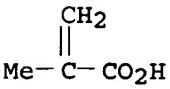
CRN 80-62-6

CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:800858 HCAPLUS
DN 141:296709
TI Manufacture of acrylic films from block copolymers
IN Guerret, Olivier; Gerard, Pierre
PA Atofina, Fr.
SO Fr. Demande, 19 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2852963	A1	20041001	FR 2003-3681	20030326
	FR 2852961	A1	20041001	FR 2003-11174	20030924
	WO 2004087796	A1	20041014	WO 2004-FR713	20040323

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI	FR 2003-3681	A	20030326
	FR 2003-11174	A	20030924

AB Films with thickness 40-300 μm, haze <2%, and breaking elongation >50% are manufactured by extrusion of compns. containing 95-100% ≥1 (A)nB block copolymers (n ≥2) and 0-5% ≥1 A' polymer where A and A' = the same or different mostly methacrylic blocks and B = mostly acrylic blocks prepared by polymerization in the presence of alkoxyamines having ≥1 alkoxyamine group bonded to an organic or mineral radical and having radicals with mol. weight >16 g/mol bonded to the N such as (EtO)2P(:O)CHMeN(CMe3)OCHMeCO2(CH2)6OCOCHMeON(CMe3)CH(CMe3)P(:O)(OEt)2.

Block B has **Tg** <0° and represents ≤50% of the copolymer, and block A optionally contains ≤20% units based on acrylic monomers.

IC ICM C08L033-06
ICS C08J005-18; B32B027-30

CC 37-3 (Plastics Manufacture and Processing)

IT **135028-55-6P**, Butyl acrylate-methacrylic acid-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); **PREP (Preparation)**
(manufacture of transparent ductile acrylic extruded films from **block** copolymers prepared in presence of alkoxyamine catalysts)

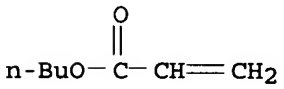
IT **135028-55-6P**, Butyl acrylate-methacrylic acid-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); **PREP (Preparation)**
(manufacture of transparent ductile acrylic extruded films from **block** copolymers prepared in presence of alkoxyamine catalysts)

RN 135028-55-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

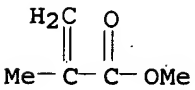
CM 1

CRN 141-32-2
CMF C7 H12 O2



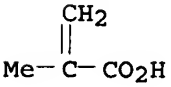
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



L73 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:525107 HCAPLUS
DN 141:72800
TI Star-shaped acrylic block copolymers for pressure-sensitive adhesives and

hot-melt adhesives
IN Simal, Francois; Tweedy, Harrell; Van Es, Steven; Roose, Patrice
PA Ucb, S.A., Belg.
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

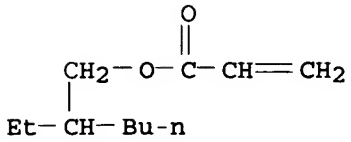
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1433799	A2	20040630	EP 2002-28900	20021223
EP 1433799	A3	20040714		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
WO 2004056898	A2	20040708	WO 2003-EP14658	20031219
WO 2004056898	A3	20041111		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI EP 2002-28900	A	20021223		

AB The star-shaped thermoplastic elastomers made of acrylic block copolymers, are obtained by transition metal-catalyzed radical polymerization and are constituted of core arms made by monomers and had **Tg** -65° to -20°, and of shell arms made by monomers and had **Tg** 70-160°. The core copolymer has polydispersity ≥2 and the final copolymer has polydispersity 3-10. Thus, a star-block copolymer comprised a core block containing Bu acrylate 200 mL, 2-bromoisobutyrate of pentaerythritol 1090 mg, CuBr 854.7 mg, Cu 37 mg, N,N,N',N',N''-pentamethyldiethylenetriamine 1.24, toluene 122 mL and dodecane 10 mL and a shell block containing Me methacrylate 19.1 mL, iso-bornyl methacrylate 27.3 mL and Cu 37 mg, showing **Tg** -48° (core block) and 145° (shell block), resp.

IC ICM C08F293-00
ICS C09J153-00
CC 39-4 (Synthetic Elastomers and Natural Rubber)
Section cross-reference(s): 38
IT 119786-15-1P, 2-Ethylhexyl acrylate-methyl methacrylate block copolymer
141386-42-7P 710338-07-1P, Butyl acrylate-isobornyl methacrylate-methyl methacrylate **block** copolymer 710338-08-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-**block**, rubber; star-shaped acrylic **block** copolymers for pressure-sensitive adhesives and hot-melt adhesives)
IT **141386-42-7P 710338-07-1P**, Butyl acrylate-isobornyl methacrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-**block**, rubber; star-shaped acrylic **block** copolymers for pressure-sensitive adhesives and hot-melt adhesives)
RN 141386-42-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate and methyl 2-propenoate, block (9CI) (CA INDEX NAME)

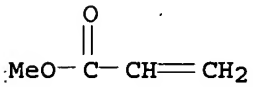
CM 1

CRN 103-11-7
CMF C11 H20 O2



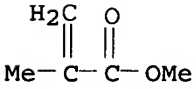
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

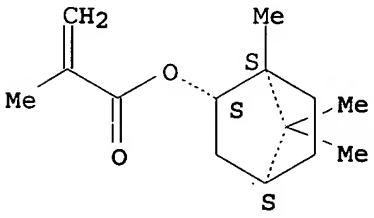


RN 710338-07-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

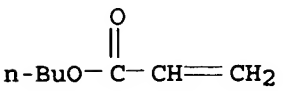
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



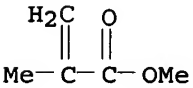
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:414661 HCAPLUS
DN 140:407926
TI Melt-processable (meth)acrylate block copolymer compositions for adhesives and their preparation
IN Everaerts, Albert I.; Ma, Jingjing; Khandpur, Ashish K.; D'Haese, Francois C.; Xia, Jianhui; Nguyen, Lang N.
PA 3M Innovative Properties Co., USA
SO U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004097658	A1	20040520	US 2002-295810	20021115
	US 6806320	B2	20041019		
	WO 2004046215	A2	20040603	WO 2003-US33318	20031010
	WO 2004046215	A3	20041111		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

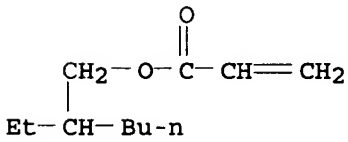
PRAI US 2002-295810 A 20021115
AB The composition, useful for adhesives, pressure-sensitive adhesives, sealants, elastomers, etc., comprises a block copolymer containing ≥1 soft polymeric block with low **glass transition** temperature and ≥1 high **glass transition** temperature copolymeric end block containing first monomeric units and aromatic monomeric units, and second monomeric units; and a tackifier. Thus, poly(tert-Bu acrylate) was

polymerized with Me methacrylate and cyclohexyl methacrylate and transesterification reacted with isooctyl alc. to give a block polymer with mol. weight of Me methacrylate-cyclohexyl methacrylate block 8000 and mol. weight of poly(isooctyl acrylate) 180,000.

IC ICM C08F293-00
INCL 525244000; 525299000
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 39, 42
IT **690269-23-9P**, Cyclohexyl methacrylate-2-ethylhexyl acrylate-methyl methacrylate **block** copolymer 690271-92-2P 690271-95-5P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(melt-processable (meth)acrylate **block** copolymer compns. for adhesives)
IT **690269-22-8P** 690271-91-1P **842150-65-6P** 842150-68-9P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**triblock**; melt-processable (meth)acrylate **block** copolymer compns. for adhesives)
IT **690269-23-9P**, Cyclohexyl methacrylate-2-ethylhexyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(melt-processable (meth)acrylate **block** copolymer compns. for adhesives)
RN 690269-23-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with 2-ethylhexyl 2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

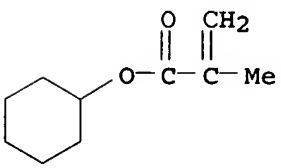
CM 1

CRN 103-11-7
CMF C11 H20 O2



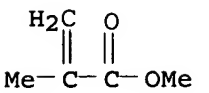
CM 2

CRN 101-43-9
CMF C10 H16 O2



CM 3

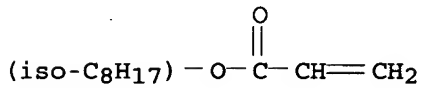
CRN 80-62-6
CMF C5 H8 O2



IT **690269-22-8P 842150-65-6P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(**triblock**; melt-processable (meth)acrylate **block** copolymer compns. for adhesives)
RN 690269-22-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with isooctyl 2-propenoate and 2-methylpropyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

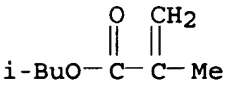
CM 1

CRN 29590-42-9
CMF C11 H20 O2
CCI IDS



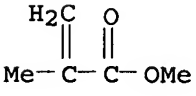
CM 2

CRN 97-86-9
CMF C8 H14 O2



CM 3

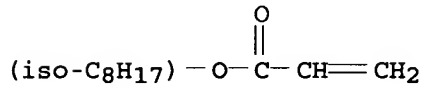
CRN 80-62-6
CMF C5 H8 O2



RN 842150-65-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with isooctyl 2-propenoate and 2-methylpropyl 2-methyl-2-propenoate, triblock (9CI) (CA INDEX NAME)

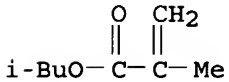
CM 1

CRN 29590-42-9
CMF C11 H20 O2
CCI IDS



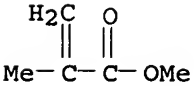
CM 2

CRN 97-86-9
CMF C8 H14 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:125136 HCAPLUS
DN 140:321830
TI Synthesis of Block Copolymers Possessing Fluoropolymer and Non-Fluoropolymer Segments by Radical Polymerization
AU Shi, Zhiqing; Holdcroft, Steven
CS Department of Chemistry, Simon Fraser University, Burnaby, BC, V5A 1S6, Can.
SO Macromolecules (2004), 37(6), 2084-2089
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB The synthesis of block copolymers comprising fluoropolymer and non-fluoropolymer segments is reported. The synthetic method is based on chain transfer emulsion polymerization of fluoro monomers and their subsequent

employment as macroinitiators in atom transfer radical polymerization (ATRP) of non-fluorinated vinyl monomers. Trichloromethyl-terminated copolymers of vinylidene difluoride (VDF) and hexafluoropropylene (HFP), possessing mol. wts. up to 25 000 g/mol, were obtained by emulsion polymerization in the presence of chloroform and used to initiate the ATRP of styrene (St) and Me methacrylate (MMA) to form a series of P(VDF-co-HFP)-b-PS and P(VDF-co-HFP)-b-PMMA block copolymers. NMR, GPC, DSC, and TEM anal. confirmed the compns. of the block copolymers. The polymers exhibited a phase-separated morphol. in the solid state and possessed distinct **glass transition** temps. associated with fluoropolymer, PS, and PMMA domains.

CC 35-4 (Chemistry of Synthetic High Polymers)

IT **Glass transition** temperature
Molecular weight
Molecular weight distribution
(synthesis of block copolymers possessing fluoropolymer and non-fluoropolymer segments by radical polymerization)

IT 677353-47-8P, Vinylidene fluoride-hexafluoropropylene-styrene block copolymer **677353-57-0P**
RL: PRP (Properties); SPN (Synthetic preparation); **PREP (Preparation)**
(synthesis of **block** copolymers possessing fluoropolymer and non-fluoropolymer segments by radical polymerization)

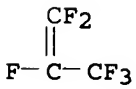
IT **677353-57-0P**
RL: PRP (Properties); SPN (Synthetic preparation); **PREP (Preparation)**
(synthesis of **block** copolymers possessing fluoropolymer and non-fluoropolymer segments by radical polymerization)

RN 677353-57-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,1-difluoroethene and 1,1,2,3,3,3-hexafluoro-1-propene, block (9CI) (CA INDEX NAME)

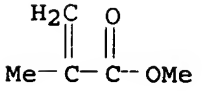
CM 1

CRN 116-15-4
CMF C3 F6



CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 75-38-7

CMF C2 H2 F2

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:582655 HCAPLUS
DN 139:134993
TI Coating agents for antiblocking of dip moldings and dip moldings therefrom
IN Liu, Xiang; Nakamura, Misao; Kodama, Kazumi
PA Nippon Zeon Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003213197	A2	20030730	JP 2002-15707	20020124
	WO 2003062307	A2	20030731	WO 2003-JP657	20030124
	WO 2003062307	A3	20031030		

W: CN, US
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR

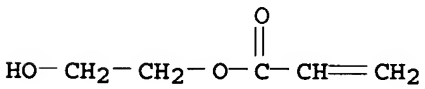
PRAI	JP 2002-15707	A	20020124
	JP 2002-188921	A	20020628

AB Title agents contain polymer latices consisting of polymer components having **glass-transition** temperature (**Tg**) of -20° to +30° and polymer components having **Tg** of 60-140°. Polymerizing Bu acrylate (I) and Me methacrylate (II) in aqueous medium containing poly(vinyl alc.) (PVA) and K2S2O8, further adding aqueous emulsion containing I, II, 2-hydroxyethyl acrylate and PVA gave a latex containing 350-nm polymer with **Tg** of -2° and +94°. A coagulated carboxylated nitrile rubber film-attached glove mold was dipped into the above latex, pulled, and vulcanized to form a glove showing smooth removability from mold, no blocking, and resin dust 0.38 mg.
IC ICM C09D157-00
ICS A41D019-00; B29C041-14; C08F002-00; C08F002-16; C08F002-44; C08F261-04; C09D005-02; C09D121-02; C09D129-04
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 39
IT Acrylic polymers, uses
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(block; low and high **glass-transition** temperature-containing polymer latex coatings for antiblocking of rubber gloves)
IT Coating materials
(blocking-resistant; low and high **glass-transition** temperature-containing polymer latex coatings for antiblocking of rubber gloves)
IT Nitrile rubber, uses
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES

(Uses)
(carboxy-containing; low and high **glass-transition** temperature-containing polymer latex coatings for antiblocking of rubber gloves)
IT Gloves
(low and high **glass-transition** temperature-containing polymer latex coatings for antiblocking of rubber gloves)
IT **475503-95-8P**, Butyl acrylate-2-hydroxyethyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(low and high **glass-transition** temperature-containing polymer latex coatings for antiblocking of rubber gloves)
IT 9003-18-3
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(nitrile rubber, carboxy-containing; low and high **glass-transition** temperature-containing polymer latex coatings for antiblocking of rubber gloves)
IT **475503-95-8P**, Butyl acrylate-2-hydroxyethyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(low and high **glass-transition** temperature-containing polymer latex coatings for antiblocking of rubber gloves)
RN 475503-95-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-hydroxyethyl 2-propenoate, block (9CI) (CA INDEX NAME)

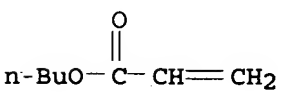
CM 1

CRN 818-61-1
CMF C5 H8 O3



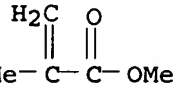
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:68838 HCAPLUS
DN 138:107977
TI Two sided pressure-sensitive adhesive sheet using block copolymer substrate and its production method
IN Kawaguchi, Yoshihide; Moroishi, Hiroshi; Inoue, Tetsuo; Doi, Tomoko
PA Nitto Denko Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

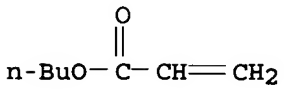
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003027018	A2	20030129	JP 2001-217014	20010717
PRAI	JP 2001-217014		20010717		

AB Titled sheet with good re-peelability after using is obtained by laminating adhesive layers on both sides of a stretched substrate film, which is made from a block copolymer composed of 40-90 weight% of block (A) with **Tg** >300 K, Mn = 35,000-200,000, and polydispersity of 1.2-3.0, and block (B), poly(meth)acrylate, with **Tg** <300 K. Thus, Bu acrylate 2.5 g and Et acrylate 2.5 g were polymerized in the presence of 2,2'-dipyridine and CuO using Et 2-bromoisobutylate as catalyst at 100°, and then formed block copolymer with a PMMA block with **Tg** = 237 K; the block copolymer was then extruded and biaxially stretched to obtain 50-μm substrate film, on which acrylic adhesive prepared from Bu acrylate and Et acrylate was coated to receive the two side adhesive sheet.

IC ICM C09J007-02
ICS B29C055-02; B32B027-00; B32B027-30; C08F297-06; B29K033-04; B29L007-00; B29L009-00
CC 38-3 (Plastics Fabrication and Uses)
IT **141386-41-6P**, Methyl methacrylate-Butyl acrylate-2-ethylhexyl acrylate **block** copolymer **154348-34-2P**, Methyl methacrylate-Butyl acrylate-ethyl acrylate **block** copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of **block** copolymer substrate as substrate of two side pressure-sensitive adhesive sheet)
IT **141386-41-6P**, Methyl methacrylate-Butyl acrylate-2-ethylhexyl acrylate **block** copolymer **154348-34-2P**, Methyl methacrylate-Butyl acrylate-ethyl acrylate **block** copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of **block** copolymer substrate as substrate of two side pressure-sensitive adhesive sheet)
RN 141386-41-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-ethylhexyl 2-propenoate, block (9CI) (CA INDEX NAME)

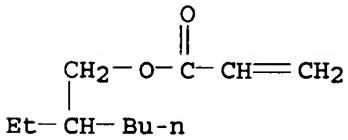
CM 1

CRN 141-32-2
CMF C7 H12 O2



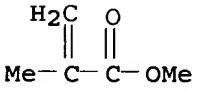
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

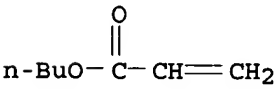
CRN 80-62-6
CMF C5 H8 O2



RN 154348-34-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and ethyl 2-propenoate, block (9CI) (CA INDEX NAME)

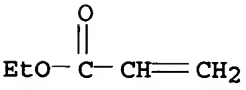
CM 1

CRN 141-32-2
CMF C7 H12 O2



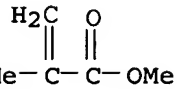
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:768010 HCAPLUS
DN 137:279937
TI Polymeric material responsible to ultrashort laser processing and plastic products therewith
IN Katayama, Shigeru; Horiike, Mika
PA Nitto Denko Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

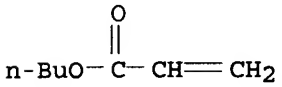
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002294086	A2	20021009	JP 2001-102876	20010402
PRAI JP 2001-102876		20010402		

AB Title resin material, processable with ultrashort laser beams of pulse width ≤10-12 s, is characterized by (A) ≥2 **glass transition** temps. and (B) ≥10% light transmission in the whole visible region. Thus, the block copolymer of PMMA and Bu acrylate and Et acrylate random copolymer by living radical polymerization was added with a triazine crosslinker (with maximum absorption at 250 nm and 360 nm), cast into a film (light transmission 92.7% and **glass transition** temps. -30° and 104°, resp.), and irradiated with femtosecond Ti:saphhire laser, showing a localized refractive index change of 1.9 + 10-3 in the irradiated region.
IC ICM C08L101-00
ICS B29C071-04; C08F297-00; C08J007-00; B29K101-00
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 36, 38
IT **154348-34-2P**, Butyl acrylate-ethyl acrylate-methyl methacrylate **block** copolymer
RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; PROC (Process); USES (Uses)
(crosslinked with triazine; polymeric material responsible to ultrashort laser processing)
IT **154348-34-2P**, Butyl acrylate-ethyl acrylate-methyl methacrylate **block** copolymer
RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; PROC (Process); USES (Uses)
(crosslinked with triazine; polymeric material responsible to ultrashort laser processing)

RN 154348-34-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and ethyl 2-propenoate, block (9CI) (CA INDEX NAME)

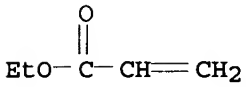
CM 1

CRN 141-32-2
CMF C7 H12 O2



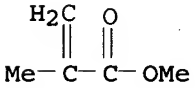
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:538222 HCAPLUS
DN 137:79657
TI Acrylic block copolymers, their manufacture, and vibration damping compositions containing them
IN Yamazaki, Hiroshi; Yoshida, Masatoshi
PA Nippon Shokubai Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002201244	A2	20020719	JP 2000-402624	20001228
PRAI	JP 2000-402624		20001228		

AB The copolymers are manufactured by polymerizing ≥2 sets of monomer components with different composition, satisfying that (A) the maximum difference of **glass-transition** temperature (**Tg**) of polymers derived from each component is 130-200° and (B) content of the

components giving polymers with **Tg** ≥50° is 35-65% (on the total components), in the presence of mercaptanes with valence of ≥3, wherein the 2nd monomer component (different from the 1st monomer component) is added while d.p. of the 1st one is ≤45%. Thus, polymerizing Me methacrylate 267.3, acrylic acid (I) 2.7, and trimethylolpropane tris(3-mercaptopropionate) 6.0 parts to d.p. 31.1%, dropping a 326.7:3.3 Bu acrylate-I mixture to the intermediate, and polymerizing them resulted in a block copolymer showing a temperature range satisfying tanδ of ≥3 -8 to 129°, tensile strength 1.06 MPa, and elongation 1630%.

IC ICM C08F293-00
ICS C08L053-00; C09K003-00; F16F015-02; F16F015-04; F16F015-08

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38

IT **167936-22-3P**, Acrylic acid-butyl acrylate-methyl methacrylate **block** copolymer 214077-20-0P, Acrylic acid-butyl acrylate-methyl methacrylate-tetraethylene glycol diacrylate block copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of acrylic star-**block** copolymers with good vabration-damping properties in wide temperature range)

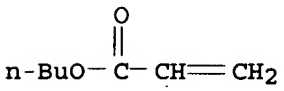
IT **167936-22-3P**, Acrylic acid-butyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(manufacture of acrylic star-**block** copolymers with good vabration-damping properties in wide temperature range)

RN 167936-22-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

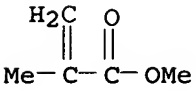
CM 1

CRN 141-32-2
CMF C7 H12 O2



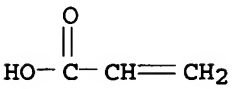
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



L73 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:396625 HCAPLUS
DN 136:402815
TI Adhesive compositions with good peelability and adhesion stability, and their products
IN Kobayashi, Nobuhiro; Tsunemine, Naoki; Kataoka, Shingo
PA Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

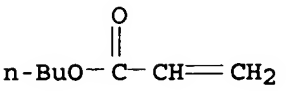
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002155255	A2	20020528	JP 2000-354594	20001121
PRAI JP 2000-354594		20001121		

AB The compns. contain (A) polymercaptan-initiated star block polymers, which mainly comprise (meth)acrylic acid C1-25 alkyl esters and have blocks showing **Tg** ≥273 K and blocks showing **Tg** <273 K and (B) polycarboxylic acids. Thus, Me methacrylate and acrylic acid were polymerized in the presence of pentaerythritol tetrakisthioglycolate and further polymerized with Bu acrylate and acrylic acid to give a copolymer solution, which was mixed with unneutralized Latemul ASK and other additives to give a hot-melt adhesive showing heat-resistant high adhesive strength and good peelability.

IC ICM C09J151-00
ICS C09J007-02; C09J011-06; G09F003-10; C09J163-00; C09J175-04
CC 38-3 (Plastics Fabrication and Uses)
IT 108501-18-4P, Butyl acrylate-methyl methacrylate block copolymer **167936-22-3P**, Acrylic acid-butyl acrylate-methyl methacrylate **block** copolymer 431877-50-8P, Acrylic acid-butyl acrylate-hydroxyethyl acrylate-phenyl methacrylate block copolymer 431878-03-4P, Acrylic acid-butyl acrylate-2-ethylhexyl acrylate-hydroxyethyl acrylate-methyl methacrylate block copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-**block**, polymercaptan-initiated; adhesive compns. with good peelability and adhesion stability)
IT **167936-22-3P**, Acrylic acid-butyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-**block**, polymercaptan-initiated; adhesive compns. with good peelability and adhesion stability)
RN 167936-22-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

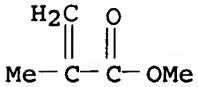
CM 1

CRN 141-32-2
CMF C7 H12 O2



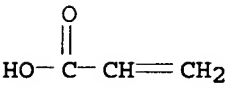
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



L73 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:244673 HCAPLUS
DN 136:279866
TI Preparation of high-molecular-weight block copolymers
IN Moroishi, Hiroshi; Yamamoto, Michiharu; Kawaguchi, Yoshihide; Nakano, Fumiko; Doi, Tomoko
PA Nitto Denko Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002097238	A2	20020402	JP 2000-286669	20000921
PRAI JP 2000-286669		20000921		

AB The polymers with Mn ≥10,000 and tensile modulus ≥1 kg/mm2 comprise a polymeric block with **Tg** <300 K and a polymeric block with **Tg** ≥300 K and show no adhesiveness at room temperature Thus, a hydroxy-terminated Bu acrylate-Me methacrylate block copolymer (Mn 48,000) was prepared in the presence of 2,2'-bipyridine, copper bromide, and a small amount of 6-hydroxyhexyl acrylate. The polymer was extruded to give a thermally stable transparent film with tensile modulus 35 kg/mm2.

IC ICM C08F297-08
ICS C08F004-10; C09D153-00; C09D201-00
CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 38

IT 108501-18-4DP, Butyl acrylate-methyl methacrylate block copolymer, hydroxy-terminated **154348-34-2P**, Butyl acrylate-ethyl acrylate-methyl methacrylate **block** copolymer 405905-87-5P, Butyl acrylate-methyl methacrylate-trimethylolpropane-TDI copolymer **405907-08-6P**, Butyl acrylate-2-methoxyethyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of high-mol.-weight **block** copolymers by living radical polymerization)

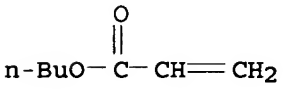
IT **154348-34-2P**, Butyl acrylate-ethyl acrylate-methyl methacrylate **block** copolymer **405907-08-6P**, Butyl acrylate-2-methoxyethyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(preparation of high-mol.-weight **block** copolymers by living radical polymerization)

RN 154348-34-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and ethyl 2-propenoate, block (9CI) (CA INDEX NAME)

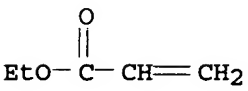
CM 1

CRN 141-32-2
CMF C7 H12 O2



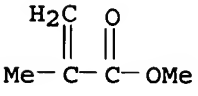
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

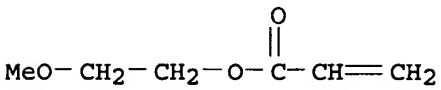


RN 405907-08-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-methoxyethyl 2-propenoate, block (9CI) (CA INDEX NAME)

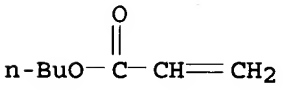
CM 1

CRN 3121-61-7
CMF C6 H10 O3



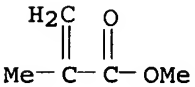
CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:107475 HCAPLUS
DN 136:168590
TI Adhesives based on block copolymers having B-A/C-B structures
IN Husemann, Marc; Zoellner, Stephan
PA Tesa A.-G., Germany
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002010307	A2	20020207	WO 2001-EP8736	20010727
	WO 2002010307	A3	20020502		
	W: JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	DE 10036804	A1	20020207	DE 2000-10036804	20000728
	EP 1311648	A2	20030521	EP 2001-969542	20010727
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
	JP 2004505164	T2	20040219	JP 2002-516029	20010727

US 2003190467 A1 20031009 US 2003-343182 20030602
PRAI DE 2000-10036804 A 20000728
WO 2001-EP8736 W 20010727

AB Block polymers useful as contact and hot-melt adhesives have the structure B-A/C-B [B = terminal block with glass temperature (**Tg**) 20-175°, A/C = copolymer block with **Tg** -80 to 0°], B being insol. in and immiscible with A/C. Stirring 400 mL styrene and 3.47 g bis(1-phenylethyl) trithiocarbonate at 110° for 30 h gave a polystyrene trithiocarbonate derivative (I) with number-average mol. weight (Mn) 34,200 and polydispersity 1.17. Stirring I 32, 2-ethylhexyl acrylate 442, N-tert-butylacrylamide 4.5, and AIBN 0.12 g at 60° for 24 h gave a block copolymer with Mn 173,000 and polydispersity 1.47, having adhesion to steel 3.4 N/cm.

IC ICM C09J153-00

CC 38-3 (Plastics Fabrication and Uses)

IT 119-61-9DP, Benzophenone, acrylate derivs., block polymers with ethylhexyl acrylate and styrene 155430-22-1P, Butyl acrylate-2-hydroxyethyl acrylate-styrene block copolymer **167936-22-3P**, Acrylic acid-butyl acrylate-methyl methacrylate **block** copolymer 395066-37-2P, Ebecryl P 36-2-ethylhexyl acrylate-styrene block copolymer 395639-59-5P, N-tert-Butylacrylamide-2-ethylhexyl acrylate-styrene block copolymer 395652-04-7P, Benzoin, acrylate-2-ethylhexyl acrylate-styrene block copolymer 395652-05-8P, Butyl acrylate-2-ethylhexyl acrylate-isoprene-styrene block copolymer 395681-29-5P, 2-Ethylhexyl acrylate-isoprene-styrene block copolymer 404963-08-2P, Butyl acrylate-isoprene-styrene block copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(adhesives based on **block** copolymers having B-A/C-B structures)

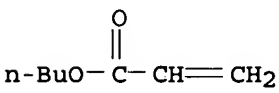
IT **167936-22-3P**, Acrylic acid-butyl acrylate-methyl methacrylate **block** copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(adhesives based on **block** copolymers having B-A/C-B structures)

RN 167936-22-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

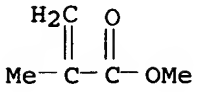
CM 1

CRN 141-32-2
CMF C7 H12 O2



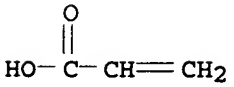
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



L73 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:25934 HCAPLUS
DN 136:86628
TI Low-stress and low-moisture-absorption epoxy resin compositions, their manufacture and cured products
IN Hikita, Shinya; Ujigawa, Norihisa
PA Nof Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002003699	A2	20020109	JP 2000-181889	20000616
PRAI JP 2000-181889		20000616		

AB The compns. contain (A) 100 parts epoxy resin base and (B) 1-50 parts A-B block copolymers having a segment A derived from Me acrylate and a segment B derived from ethylenic unsatd. monomers and average particle diameter of 0.001-200 μm, as particles dispersed in the resin base for lowering stress of cured products. Thus, preparing a block copolymer with **Tg** -50° and Mw 53,000 and having a segment derived from Me acrylate and a segment derived from 2-ethylhexyl acrylate by a 2-step polymerization using a polymeric peroxide as initiator, mixing 20 parts this copolymer with Epikote 828 100, dicyandiamide 10, an accelerator 0.5 and CaCO3 30 parts gave an adhesive which was cured at 150° for 1 h to give a cured product with tensile shear bonding strength 21 MPa, flexural strength 48 MPa, T-type release adhesive strength 48 N/25 mm, and moisture absorption 2.3%.
IC ICM C08L063-00
ICS C08F293-00; C08L063-00; C08L053-00
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42
IT 25053-96-7DP, o-Cresol-formaldehyde copolymer, glycidyl ethers 25068-38-6DP, Bisphenol A-epichlorohydrin copolymer, crosslinked with polyamidoamine 27754-24-1P, Bisphenol A-dicyandiamide-epichlorohydrin copolymer 96141-20-7P, Epiclon 830LVP 115180-61-5P, Butyl acrylate-methyl acrylate block copolymer 157232-74-1P 386706-42-9P, 2-Ethylhexyl acrylate-methyl acrylate block copolymer 386706-43-0P 386706-44-1DP, trimethylsilyl ether 386706-45-2P, Divinylbenzene-2-

ethylhexyl acrylate-methyl acrylate block copolymer **386706-46-3P**, Ethyl acrylate-2-ethylhexyl acrylate-methyl acrylate **block** copolymer 386706-47-4P, 2-Ethylhexyl acrylate-glycidyl methacrylate-methyl acrylate block copolymer **386706-48-5P**, 2-Ethylhexyl acrylate-methacrylic acid-methyl acrylate **block** copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(low-stress and low-moisture-absorption epoxy resin compns., manufacture and cured products)

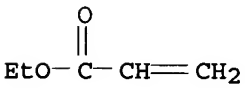
IT **386706-46-3P**, Ethyl acrylate-2-ethylhexyl acrylate-methyl acrylate **block** copolymer **386706-48-5P**, 2-Ethylhexyl acrylate-methacrylic acid-methyl acrylate **block** copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(low-stress and low-moisture-absorption epoxy resin compns., manufacture and cured products)

RN 386706-46-3 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-ethylhexyl 2-propenoate and methyl 2-propenoate, block (9CI) (CA INDEX NAME)

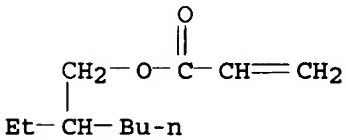
CM 1

CRN 140-88-5
CMF C5 H8 O2



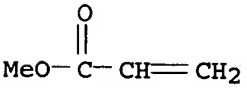
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

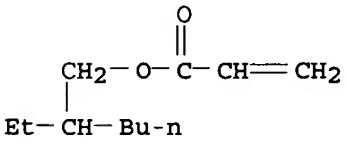
CRN 96-33-3
CMF C4 H6 O2



RN 386706-48-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and methyl 2-propenoate, block (9CI) (CA INDEX NAME)

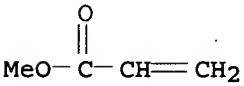
CM 1

CRN 103-11-7
CMF C11 H20 O2



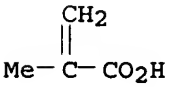
CM 2

CRN 96-33-3
CMF C4 H6 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2



L73 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:805317 HCAPLUS
DN 135:358833
TI Reactive vinyl block copolymers and curable compositions thereof
IN Kakei, Takama; Wakiya, Takeshi
PA Sekisui Chemical Co. Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001310920	A2	20011106	JP 2000-130292	20000428
PRAI	JP 2000-130292		20000428		

AB Block copolymers comprise ≥1 group of a block having **glass transition** temperature (**Tg**) <20° and a block having **Tg** >20° higher than the former. Thus, 2-ethylhexyl

acrylate-Me methacrylate block copolymer having OH terminal groups added by ethylene oxide was prepared, mixed with Coronate L at NCO-OH ratio 1.2 and dibutyltin dilaurate, coated on a corona-treated polyester film, and heated to prepare an adhesive sheet.

IC ICM C08F297-00
ICS C08F290-04; C08G018-63; C08G059-40; C08G077-442; C08G081-02; C08K003-36; C08K005-17; C08K005-3412; C08K005-541; C08L053-00

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42

IT 372119-62-5P 372119-63-6P 372119-64-7P 372119-65-8P
372119-66-9P 372119-67-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(reactive vinyl **block** copolymers and curable compns. thereof)

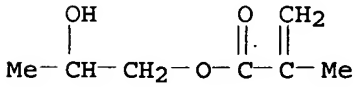
IT **372119-66-9P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(reactive vinyl **block** copolymers and curable compns. thereof)

RN 372119-66-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxypropyl ester, polymer with 2-ethylhexyl 2-propenoate and methyl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

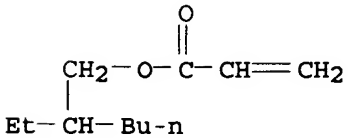
CM 1

CRN 923-26-2
CMF C7 H12 O3



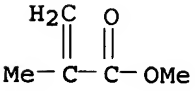
CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:767398 HCAPLUS
DN 135:325273
TI Image receiving sheet with aqueous ink receiving layer, its manufacturing method, and image formation using it
IN Matsui, Izuru
PA Fuji Xerox Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

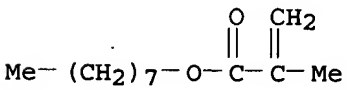
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001293944	A2	20011023	JP 2000-108953	20000411
PRAI	JP 2000-108953		20000411		

AB The medium has, on ≥1 side of a support, the layer containing a graft or a block copolymer comprising a hydrophilic and a hydrophobic segment whose **glass transition** temperature is from -100 to 50°. The method consists of processes of (1) manufacturing the above graft or block copolymer, (2) manufacturing a solution containing the copolymer, and (3) coating the solution for forming the layer containing the copolymer on ≥1 side of the support. Images are formed with an aqueous ink on the layer. The medium showed improved anti-blocking, traveling properties, storage stability, and adhesion between the layer and the support, preventing stripping of the layer, humidity effect, and curling.

IC ICM B41M005-00
ICS B41M005-00; B41J002-01
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT **367452-68-4P 367452-69-5P 367452-70-8P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ink-jet printing sheet containing **block** or graft copolymer comprising hydrophilic and hydrophobic segments)
IT **367452-68-4P 367452-69-5P 367452-70-8P**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(ink-jet printing sheet containing **block** or graft copolymer comprising hydrophilic and hydrophobic segments)
RN 367452-68-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate and octyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

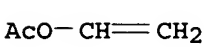
CM 1

CRN 2157-01-9
CMF C12 H22 O2



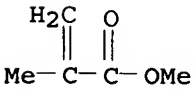
CM 2

CRN 108-05-4
CMF C4 H6 O2



CM 3

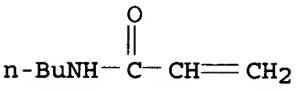
CRN 80-62-6
CMF C5 H8 O2



RN 367452-69-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N-butyl-2-propenamide and octyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

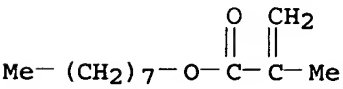
CM 1

CRN 2565-18-6
CMF C7 H13 N O



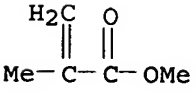
CM 2

CRN 2157-01-9
CMF C12 H22 O2



CM 3

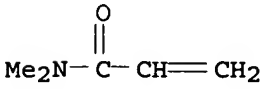
CRN 80-62-6
CMF C5 H8 O2



RN 367452-70-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N,N-dimethyl-2-propenamide and octyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

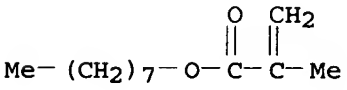
CM 1

CRN 2680-03-7
CMF C5 H9 N O



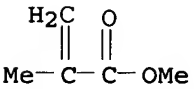
CM 2

CRN 2157-01-9
CMF C12 H22 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:384305 HCAPLUS
DN 133:18330
TI Methacrylate-siloxane block copolymer-containing elastomer compositions as impact modifiers and their thermoplastic resin compositions
IN Kimura, Katsuhiko; Aoyama, Taizo
PA Kaneka Corporation, Japan
SO PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000032690	A1	20000608	WO 1999-JP6672	19991130
	W: CN, JP, KR, US				
	RW: BE, DE, FR, GB, IT, NL				
	EP 1179566	A1	20020213	EP 1999-973049	19991130
	R: BE, DE, FR, GB, IT, NL				

US 6534594 B1 20030318 US 2001-831923 20010529
PRAI JP 1998-344601 A 19981203
WO 1999-JP6672 W 19991130

AB Title compns. comprise 1-99% title block copolymers and 1-99% graft copolymers consisting of components with **glass-transition** temperature (**Tg**) of <25° and components with **Tg** of ≥25°. Reacting 2-(4'-chloromethylphenyl)ethyldimethylsilane and vinyldimethylsilyl-terminated polydimethylsiloxane gave a chloromethylphenyl-terminated polydimethylsiloxane, which was polymerized with Me methacrylate to form a block copolymer (I). A Kanevinyl S 1008-based composition was mixed with 12% (based on 100 parts S 1008) 5:95 I and FM 21 blend and molded into a sheet with Izod impact strength 96 kg-cm/cm.

IC ICM C08L053-00
ICS C08L051-00; C08L083-04; C08L101-00

CC 37-6 (Plastics Manufacture and Processing)

IT **107052-86-8P**, Allyl methacrylate-butyl acrylate-methyl methacrylate graft copolymer 110254-02-9P, Allyl methacrylate-butyl acrylate-methyl methacrylate-styrene graft copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(methacrylate-siloxane **block** copolymer and acrylic graft polymer blends as impact modifiers for thermoplastics)

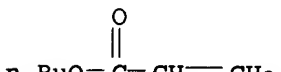
IT **107052-86-8P**, Allyl methacrylate-butyl acrylate-methyl methacrylate graft copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); **PREP (Preparation)**; USES (Uses)
(methacrylate-siloxane **block** copolymer and acrylic graft polymer blends as impact modifiers for thermoplastics)

RN 107052-86-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

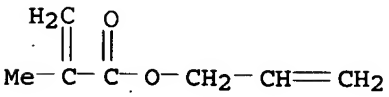
CM 1

CRN 141-32-2
CMF C7 H12 O2



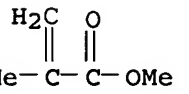
CM 2

CRN 96-05-9
CMF C7 H10 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:34606 HCAPLUS
DN 132:93812
TI Hydrogenated diene-acrylate block copolymer and polymer composition
IN Kitayama, Koji; Hamada, Kenichi; Akai, Makoto; Ishiura, Kazushige
PA Kuraray Co., Ltd., Japan
SO Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

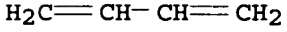
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 970979	A1	20000112	EP 1999-112744	19990701
	EP 970979	B1	20030226		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2276568	AA	20000103	CA 1999-2276568	19990629
	JP 2000080136	A2	20000321	JP 1999-183425	19990629
	US 6228946	B1	20010508	US 1999-343519	19990630
PRAI	JP 1998-204311	A	19980703		

AB A block copolymer comprises, in a main chain thereof, at least one polymer block A, at least one polymer block B and at least one polymer block C, the polymer block A being obtained by hydrogenation of at least 80% of unsatd. bonds of a butadiene-based polymer block having a 1,2-bond content less than 20% and having crystallinity; the polymer block B having a **glass transition** point not higher than 20°; and the polymer block C being composed mainly of a methacrylate ester unit and/or an acrylate ester unit and having a **glass transition** point exceeding 20°. A block copolymer was prepared by polymerization of butadiene, isoprene, and Me methacrylate and hydrogenation of the resulting polymer.
IC ICM C08F297-02
ICS C08L053-00
CC 35-4 (Chemistry of Synthetic High Polymers)
IT 106399-43-3DP, Butadiene methyl methacrylate block copolymer, hydrogenated
154425-44-2DP, Butadiene-isoprene-methyl methacrylate **block** copolymer, hydrogenated
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(hydrogenated diene-acrylate **block** copolymer and polymer composition)
IT **154425-44-2DP**, Butadiene-isoprene-methyl methacrylate **block** copolymer, hydrogenated
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); **PREP (Preparation)**; USES

(Uses)
(hydrogenated diene-acrylate **block** copolymer and polymer composition)
RN 154425-44-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene and 2-methyl-1,3-butadiene, block (9CI) (CA INDEX NAME)

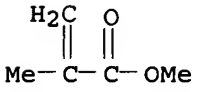
CM 1

CRN 106-99-0
CMF C4 H6



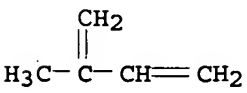
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 78-79-5
CMF C5 H8



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:752640 HCAPLUS
DN 130:125495
TI Dendrimer-like Star Block and Amphiphilic Copolymers by Combination of Ring Opening and Atom Transfer Radical Polymerization
AU Hedrick, J. L.; Trollss, M.; Hawker, C. J.; Atthoff, B.; Claesson, H.; Heise, A.; Miller, R. D.; Mecerreyes, D.; Jerome, R.; Dubois, Ph.
CS IBM Research Division, Almaden Research Center, San Jose, CA, 95120-6099, USA
SO Macromolecules (1998), 31(25), 8691-8705
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB A new type of macromol. architecture, denoted as dendrimer-like star block copolymers, is reported. These block copolymers are described by a radial geometry where the different generations or layers comprise a high mol.

weight polymer emanating from a central core. A hexahydroxyl functional core was used as an initiator for the living ring opening polymerization (ROP) of ε-caprolactone producing a hydroxyl terminated 6-arm star polymer with controlled mol. weight and narrow polydispersities (PD < 1.1). Capping these chain ends with dendrons containing activated bromide moieties produced macro-initiators for atom transfer radical polymerization (ATRP). Me methacrylate was polymerized from these macro-initiators in the presence of an organometallic promoter to produce the requisite dendrimer-like star polymers. High mol. weight was obtained with low polydispersities (<1.2). Alternatively, amphiphilic character could be introduced by designing the different layers or generations to be either hydrophobic or hydrophilic. For example, Me methacrylate (MMA) with either hydroxyethyl methacrylate (HEMA) or methacrylate functional ethylene oxide macromonomers (EO) were polymerized from these macro-initiators to provide a hydrophilic outer layer. The use of macromol. building blocks allows rapid attainment of high polymer in a limited number of steps with purification between transformation requiring only polymer precipitation

CC 35-8 (Chemistry of Synthetic High Polymers)

IT **Glass transition** temperature
NMR (nuclear magnetic resonance)
Size-exclusion chromatography
(dendrimer-like star block and amphiphilic copolymers by combination of ring opening and atom transfer radical polymerization)

IT 108167-68-6P, ε-Caprolactone-methyl methacrylate block copolymer
219754-53-7P **219794-70-4P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(6-arm star dendritic; dendrimer-like star **block** and amphiphilic copolymers by combination of ring opening and atom transfer radical polymerization)

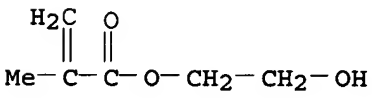
IT **219794-70-4P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(6-arm star dendritic; dendrimer-like star **block** and amphiphilic copolymers by combination of ring opening and atom transfer radical polymerization)

RN 219794-70-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with methyl 2-methyl-2-propenoate and 2-oxepanone, block (9CI) (CA INDEX NAME)

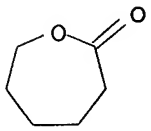
CM 1

CRN 868-77-9
CMF C6 H10 O3



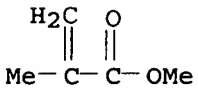
CM 2

CRN 502-44-3
CMF C6 H10 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



RE.CNT 106 THERE ARE 106 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:631718 HCAPLUS
DN 127:248487
TI Poly[poly(isobornyl methacrylate-co-methyl methacrylate) (poly(IBMA-co-MMA))-b-polybutadiene-b-poly(IBMA-co-MMA)] Copolymers: Synthesis, Morphology, and Properties
AU Yu, J. M.; Dubois, Ph.; Jerome, R.
CS Center for Education and Research on Macromolecules, University of Liege, Liege, 4000, Belg.
SO Macromolecules (1997), 30(21), 6536-6543
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB Anionic random and block copolymn. of isobornyl methacrylate (IBMA) and Me methacrylate (MMA) has been studied in THF at -78 °C by using (1,1-diphenyl-3,3-dimethylbutyl)lithium (DDBLi) as initiator in the presence of LiCl. The random copolymn. of MMA and IBMA has also been carried out at 0 °C, all the other conditions being kept unchanged. Poly[poly(IBMA)-b-poly(BD)-b-poly(IBMA)] (IBI), poly[poly(IBMA-co-MMA)-b-poly(BD)-b-poly(MMA-co-IBMA)] (I/MBM/I), and poly[poly(IBMA)-b-poly(MMA)-b-poly(BD)-b-poly(MMA)-b-poly(IBMA)] (IMBMI) block copolymers have been synthesized by sequential anionic polymerization of butadiene, MMA, and IBMA initiated by the m-diisopropenylbenzene (m-DIB)/tert-butyllithium (t-BuLi) diadduct. These block copolymers of a monomodal and narrow mol. weight distribution (.hivin.Mw/.hivin.Mn = 1.1) have been analyzed by size exclusion chromatog. (SEC), NMR, differential scanning calorimetry (DSC), dynamic mech. anal. (DMA), and transmission electron microscopy (TEM). Stereocomplexation of IMBMI and I/MBM/I with iPMMA has also been studied by DSC. Although IBI triblock copolymers show a lamellar morphol. even for relatively low hard block content (33 wt %), cylindrical and lamellar morphologies have been observed for the other block copolymers under consideration. These new block copolymers exhibit high ultimate tensile strength (30 MPa), elongation at break (1000%), and upper service temperature (140-200 °C).
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 36

IT **Glass transition** temperature
Mechanical loss
Polymer morphology
Stress-strain relationship
Stress-strain relationship
Tensile strength
(synthesis, morphol. and mech. properties of random and block isobornyl methacrylate-Me methacrylate copolymers and multiblock butadiene-isobornyl methacrylate-Me methacrylate copolymers)

IT **186753-02-6P**, Butadiene-isobornyl methacrylate-methyl methacrylate **block** copolymer
RL: PRP (Properties); SPN (Synthetic preparation); **PREP (Preparation)**
(multiblock; synthesis, morphol. and mech. properties of random and **block** isobornyl methacrylate-Me methacrylate copolymers and multiblock butadiene-isobornyl methacrylate-Me methacrylate copolymers)

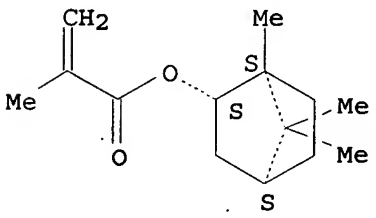
IT **186753-02-6P**, Butadiene-isobornyl methacrylate-methyl methacrylate **block** copolymer
RL: PRP (Properties); SPN (Synthetic preparation); **PREP (Preparation)**
(multiblock; synthesis, morphol. and mech. properties of random and **block** isobornyl methacrylate-Me methacrylate copolymers and multiblock butadiene-isobornyl methacrylate-Me methacrylate copolymers)

RN 186753-02-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene and exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

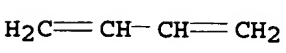
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



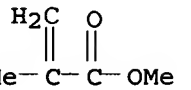
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 80-62-6
CMF C5 H8 O2



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:191572 HCAPLUS
DN 126:192979
TI Active energy ray-curing resin composition
IN Okuo, Masami; Higuchi, Yoshiki; Oomura, Hiroshi; Suyama, Shuji
PA Nippon Oils & Fats Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

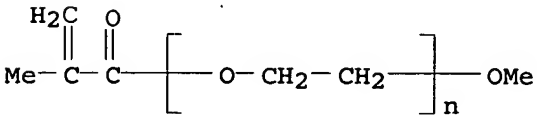
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08339084	A2	19961224	JP 1995-168030	19950609
PRAI JP 1995-168030		19950609		

AB The title composition contains (A) a block copolymer having acid group-containing hydrophilic segments and hydrophobic segments, in which the **glass transition** temperature (**Tg**) of the hydrophobic segments is ≥-5° and the **Tg** of the hydrophilic or hydrophobic segments is ≤80°, (B) a monomer which polymerizes by irradiation with active energy rays, and (C) a polymerization initiator. The composition easily developable with alkaline aqueous solns. shows high sensitivity toward active energy rays and provides a nontacky film, and the cured resin exhibits good alkali- and chemical resistance. Thus, an active energy ray-curing resin composition was prepared by using Bu methacrylate-methacrylic acid-maleic anhydride-styrene block copolymer (Tgs of hydrophilic and hydrophobic segments are 80 and 21°, resp.), TMP-6EO-3A (trimethylolpropane triacrylate-ethylene oxide adduct), and Irgacure 907 (photopolymn. initiator).
IC ICM G03F007-038
ICS G03F007-00; G03F007-027; G03F007-028; G03F007-033; H05K003-28
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 187404-98-4P, Butyl methacrylate-maleic anhydride-methacrylic acid-styrene block copolymer 187404-99-5P, Ethyl acrylate-hydroxyphenylmaleimide-methyl methacrylate-styrene block copolymer 187405-00-1P 187405-01-2P, Butyl acrylate-butyl methacrylate-methyl methacrylate-polyethylene glycol methyl ether methacrylate-sulfoethylmethacrylate mono-2-methacryloyloxyethyl acid phosphate block copolymer **187405-02-3P**, Butyl methacrylate-methyl methacrylate-polyethylene glycol methyl ether methacrylate **block** copolymer
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(active energy ray-curing resin composition containing **block** copolymer and monomer)
IT **187405-02-3P**, Butyl methacrylate-methyl methacrylate-polyethylene glycol methyl ether methacrylate **block** copolymer
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or

engineered material use); **PREP (Preparation)**; USES (Uses)
(active energy ray-curing resin composition containing **block** copolymer and monomer)
RN 187405-02-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), block (9CI) (CA INDEX NAME)

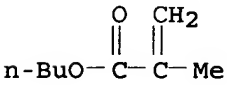
CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



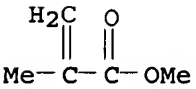
CM 2

CRN 97-88-1
CMF C8 H14 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:148870 HCAPLUS
DN 126:158618
TI Gels of oil-extended methacrylate-alkylene-methacrylate multiblock copolymers
IN Graulus, Hendrik; Overbergh, Noel; Hudson, John; Hammond, Philip James; Yu, Jianming; Perkins, Anthony
PA Raychem Limited, UK
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 9700292	A1	19970103	WO 1996-GB1381	19960610
	W: AU, BR, CA, CN, CZ, HU, JP, KR, MX, NO, NZ, PL, RO, RU, SG, SK, TR, UA, US, VN				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 832158	A1	19980401	EP 1996-917577	19960610
	EP 832158	B1	19991201		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
	CN 1187835	A	19980715	CN 1996-194747	19960610
	CN 1070520	B	20010905		
	JP 11507686	T2	19990706	JP 1997-502781	19960610
	AT 187190	E	19991215	AT 1996-917577	19960610
	AU 9660105	A1	19970115	AU 1996-60105	19960612
	US 5994446	A	19991130	US 1998-981167	19980325
PRAI	GB 1995-12125	A	19950615		
	GB 1996-8748	A	19960426		
	WO 1996-GB1381	W	19960610		

AB Title copolymers having number average mol. weight (Mn) ≥50,000, preferably with poly(Me methacrylate) end blocks and butadiene or ethylene/butylene mid-block, have higher **glass transition** temps. than known styrene-alkylene-styrene triblock gels. Addnl. copolymers have end blocks of higher alkyl (e.g. isobornyl) methacrylate homopolymer or copolymers and can contain styrene blocks. Mixed methyl- and higher alkyl-methacrylate end blocks reduce gel-formation problems which may arise from the solubility parameter of isobornyl methacrylate homopolymer end blocks being too close to that of the extender oil. Thus, a hydrogenated Me methacrylate-butadiene-Me methacrylate triblock copolymer (Mn of blocks 13,000, 69,000, 13,000, resp.) was dissolved in toluene, mixed with Fina A 360B oil, and the solvent removed, giving a gel having tensile strength 33 kPa, elongation at break 559%, and softening point 172°.

IC ICM C08L053-00
ICS C08K005-00

CC 39-4 (Synthetic Elastomers and Natural Rubber)
Section cross-reference(s): 35

IT 106399-43-3DP, Butadiene-methyl methacrylate block copolymer, hydrogenated
110302-49-3DP, hydrogenated **186753-02-6DP**, hydrogenated
821786-89-4DP, hydrogenated 827030-22-8DP, hydrogenated
837389-85-2DP, hydrogenated
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); **PREP (Preparation)**; PROC (Process)
(**triblock**, rubber; gels of oil-extended methacrylate-alkylene-methacrylate multiblock copolymers)

IT 167946-15-8P, Butadiene-isobornyl methacrylate block copolymer
184295-33-8P **186753-02-6P** 837365-59-0P 837387-38-9P
837389-85-2P
RL: IMF (Industrial manufacture); PRP (Properties); **PREP (Preparation)**
(**triblock**, rubber; preparation for oil-extended gels)

IT **186753-02-6DP**, hydrogenated **837389-85-2DP**, hydrogenated
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); **PREP (Preparation)**; PROC (Process)
(**triblock**, rubber; gels of oil-extended methacrylate-alkylene-methacrylate multiblock copolymers)

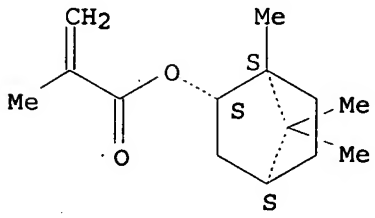
RN 186753-02-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene and exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

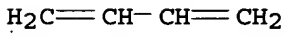
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



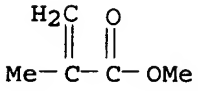
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 80-62-6
CMF C5 H8 O2

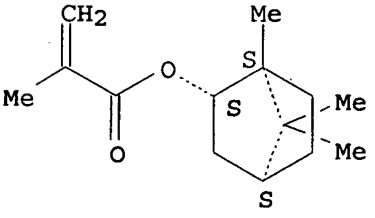


RN 837389-85-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate, triblock (9CI) (CA INDEX NAME)

CM 1

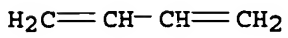
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



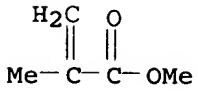
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 80-62-6
CMF C5 H8 O2

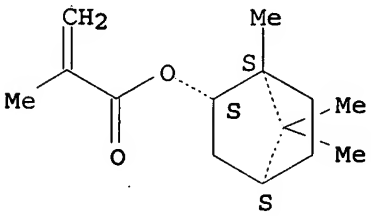


IT **186753-02-6P 837389-85-2P**
RL: IMF (Industrial manufacture); PRP (Properties); **PREP (Preparation)**
(**triblock**, rubber; preparation for oil-extended gels)
RN 186753-02-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene and exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

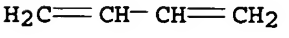
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



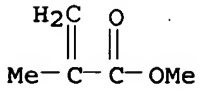
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 80-62-6
CMF C5 H8 O2

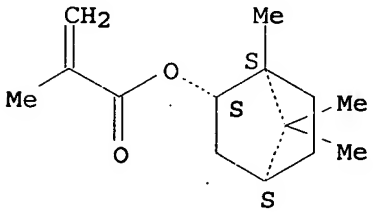


RN 837389-85-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate, triblock (9CI) (CA INDEX NAME)

CM 1

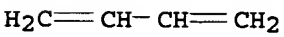
CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



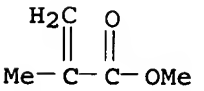
CM 2

CRN 106-99-0
CMF C4 H6



CM 3

CRN 80-62-6
CMF C5 H8 O2



L73 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:583572 HCAPLUS
DN 125:196749
TI Manufacture of thermoplastic star-block addition polymers showing good vibration-damping property and adhesion
IN Yoshida, Masatoshi; Kobayashi, Nobuhiro

PA Nippon Catalytic Chem Ind, Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

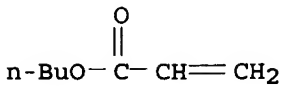
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08188631	A2	19960723	JP 1995-2848	19950111
	JP 2934586	B2	19990816		
PRAI	JP 1995-2848		19950111		

AB The polymers comprises (1) polymer assemblies consisting of (A) multivalent mercaptan components and (B) several copolymer components of ≥2 polymerizable unsatd. monomer units radially elongated from the mercaptan components, in which the compns. of the copolymer components are gradually changed in the whole assemblies or (2) ≥2 polymerizable unsatd. monomer units and shows Mn 4000-1,000,000, parallel light transmittance ≥85%, and one **Tg** peak with ≥50° deviation. The polymers are manufactured by (1) mixing polymerizable unsatd. monomers and multivalent mercaptans, (2) slowly adding other polymerizable unsatd. monomers to the mixts., and (3) radically polymerizing these monomers from mercapto groups of the mercaptanes as starting points. Thus, Me methacrylate 285, acrylic acid (I) 15, and pentaerythritol tetrakis(thioglycolate) 5 parts were heated at 80° for 30 min in 300 parts BuOAc containing 0.1 part AIBN, followed by dropping a mixture of 665 parts Bu acrylate and 35 parts I for 4 h and treating for 1 h to give a polymer with (Mn) 95.5 + 104, parallel light transmittance 90.5%, and S content 0.15%, which was dissolved in Bu acetate and applied on a PET film to give a transparent adhesive tape with adhesive strength to a SUS plate 1800 kg/cm2.

IC ICM C08F297-02
CC 35-4 (Chemistry of Synthetic High Polymers)
ST thermoplastic addn copolymer star block; mercaptan unsatd monomer radical polymn block; parallel light transmittance thermoplastic addn polymer; **glass transition** temp thermoplastic addn polymer; adhesive tape thermoplastic star block copolymer; vibration damper thermoplastic star block polymer
IT 106911-77-7P, Methyl methacrylate-styrene block copolymer 156515-20-7P **167936-22-3P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-**block**; manufacture of thermoplastic star-**block** addition polymers)
IT **167936-22-3P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); **PREP (Preparation)**; USES (Uses)
(star-**block**; manufacture of thermoplastic star-**block** addition polymers)
RN 167936-22-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

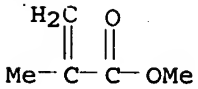
CM 1

CRN 141-32-2
CMF C7 H12 O2



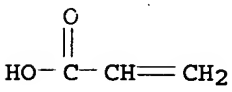
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2



L73 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:792794 HCAPLUS
DN 123:199743
TI Block polymer, thermoplastic addition polymer, production process, and use
IN Yoshida, Masatoshi; Kobayashi, Nobuhiro; Hasegawa, Hiroaki
PA Nippon Shokubai Co., Ltd., Japan
SO PCT Int. Appl., 157 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9518162	A1	19950706	WO 1994-JP2198	19941222
	W: CN, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 07179538	A2	19950718	JP 1993-328954	19931224
	JP 2842782	B2	19990106		
	JP 08165462	A2	19960625	JP 1994-309189	19941213
	JP 3377315	B2	20030217		
	JP 2000303048	A2	20001031	JP 2000-69536	19941213
	JP 3534340	B2	20040607		
	JP 08176519	A2	19960709	JP 1994-318630	19941221
	EP 686653	A1	19951213	EP 1995-903944	19941222
	EP 686653	B1	19990818		
	R: BE, DE, FR, GB, IT, NL				
	CN 1118167	A	19960306	CN 1994-191285	19941222
	CN 1077900	B	20020116		
	US 5679762	A	19971021	US 1995-507243	19950818

	US 5869598	A	19990209	US 1997-872212	19970610
PRAI	JP 1993-328954	A	19931224		
	JP 1994-309189	A	19941213		
	JP 1994-318630	A	19941221		
	WO 1994-JP2198	W	19941222		
	US 1995-507243	A3	19950818		

AB The title polymer useful in various applications including hot-melt resin composition, pressure-sensitive adhesive and support for pressure-sensitive adhesive has a configuration comprising a polyvalent mercaptan unit as the center and a number of polymer segments projecting therefrom radially, and has Mn 2,000-1,000,000. The polymer segments have at least two different compns. The block polymer is produced by at least two-stage free-radical polymerization of various polymerizable monomer components having different compns. by using a polyvalent mercaptan as the polymerization initiator. Styrene was polymerized in the presence of pentaerythritol tetrakis(thioglycolate) to obtain a radial polymer, then Bu acrylate and acrylic acid were polymerized in the above polymerization mixture to obtain a resilient block copolymer with Mn 39,000, mol. weight distribution 8.1, and **Tg** -35° and +90°.

IC ICM C08F293-00
ICS C09J153-00; C08L053-00; C08G075-14; C09J201-00; C09J201-02; C09J133-06

CC 35-4 (Chemistry of Synthetic High Polymers)

IT 106911-77-7P, Methyl methacrylate-styrene block copolymer 108146-73-2P, Acrylonitrile-butadiene-styrene block copolymer 131830-42-7P 167770-42-5P 167770-43-6P 167770-44-7P 167770-45-8P 167770-46-9P 167770-47-0P 167770-48-1P **167936-22-3P** 167936-23-4P 167936-24-5P 168146-34-7P
RL: IMF (Industrial manufacture); PRP (Properties); **PREP (Preparation)**
(**block** polymer, thermoplastic addition polymer, production process, and use)

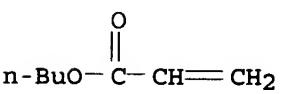
IT **167936-22-3P**
RL: IMF (Industrial manufacture); PRP (Properties); **PREP (Preparation)**
(**block** polymer, thermoplastic addition polymer, production process, and use)

RN 167936-22-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

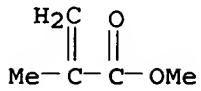
CM 1

CRN 141-32-2
CMF C7 H12 O2



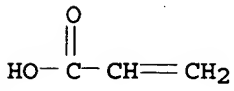
CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

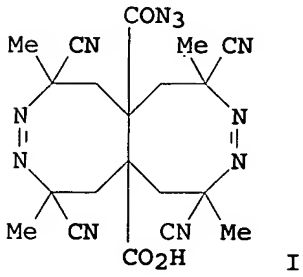
CRN 79-10-7
CMF C3 H4 O2



L73 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1985:579127 HCAPLUS
DN 103:179127
TI Radial block polymers
IN Dean, Barry D.
PA Atlantic Richfield Co., USA
SO U.S., 9 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4532301	A	19850730	US 1984-668060	19841105
	JP 61113609	A2	19860531	JP 1985-130965	19850618
	JP 06017379	B4	19940309		
	EP 182527	A1	19860528	EP 1985-307904	19851031
	EP 182527	B1	19890426		
	R: BE, DE, FR, GB, IT, NL				
PRAI	US 1984-668060	A	19841105		

GI



I

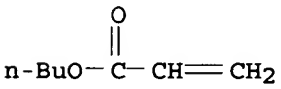
AB The title polymers having ≥4 arms are prepared using bis azo compound I [99007-70-2] as polymerization initiator. Five-arm radial block copolymers are suitable for use as impact modifiers for thermoformable plastics. Thus, I was prepared by Diels-Alder reaction of acetylenedicarboxylic acid [142-45-0] with 2,3-dimethyl-1,3-butadiene [513-81-5], Lemieux-Von Rudloff oxidation of the adduct [93164-14-8], treatment of the oxidized

adduct [99007-67-7] with NaCN and H2NNH2.H2SO4 to give a cyano-substituted bicyclic dihydrazine [99007-68-8], which was oxidized with Br to the bis azo derivative [99007-69-9] and converted to the monoazide. I (43.46 g) was condensed with 50 g OH-terminated poly(Me methacrylate) at 60° for 12 h in dry PhCl, and then with 165 g Bu acrylate and 75 g Et acrylate in 600 g AcOEt at 85° for 72 h to give a radial block copolymer (II) [25767-43-5] having 5 arms and **glass-transition** temperature 73° [poly(Me methacrylate)] and -29° (Bu acrylate-Et acrylate copolymer). A blend of Dylark 332 (maleic anhydride-styrene copolymer) [9011-13-6] 800, II 200, Ultranox 256 (antioxidant) 2.0, and Ultranox 626 (antioxidant) 1.5 g was extruded, pelletized, and injection-molded into a test piece with notched Izod impact strength (ASTM D-256) 4.2 ft-lb/in., compared with 0.5 ft-lb/in. without II.

IC ICM C08F293-00
INCL 525280000
CC 37-3 (Plastics Manufacture and Processing)
IT **25767-43-5P** 98972-14-6P
RL: **PREP (Preparation)**
(radial **block**, five-arm, impact modifier, preparation of, using bicyclic disazo initiator)
IT **25767-43-5P**
RL: **PREP (Preparation)**
(radial **block**, five-arm, impact modifier, preparation of, using bicyclic disazo initiator)
RN 25767-43-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and ethyl 2-propenoate (9CI) (CA INDEX NAME)

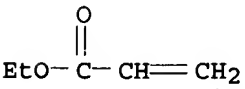
CM 1

CRN 141-32-2
CMF C7 H12 O2



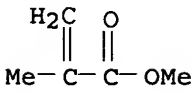
CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



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